Documentation

WORKSHOP ON EU LAW ON INDUSTRIAL EMISSIONS

413DV121

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Background Documentation

A. The Role of the National Judge in the European Judicial System and the Procedures of the CJEU

	EU Documents	
1	Selected articles from the consolidated versions of the Treaty on European Union and the Treaty on the functioning of the European Union, including Statute of the Court of Justice of the European Union (OJ C 83 of 30 March 2010, p.1)	
2	Rules of Procedure of the Court of Justice (consolidated version of 25 September 2012)	
3	Recommendations to national courts and tribunals in relation to the initiation of preliminary ruling procedure (OJ C 338 of 6 November 2012, p. 1)	
	Selected CJEU Case Law	
4	Case 26/62 *Van Gend & Loos* [1963] ECR 1.	
5	Case 6/64 *Costa v Enel* [1964] ECR 585.	
6	Case 41/74 *van Duyn* [1974] ECR 1337.	
7	Case 283/81 *Cilfit and Others* [1982] ECR 3415	
8	Case 314/85 *Foto-Frost* [1987] ECR 4199	
9	Case 222/86 *Heylens and others* [1987] ECR 4097	
10	Case 247/87 *Star Fruit* v *Commission* [1989] ECR 291	
11	Case C-415/93 *Bosman* [1995] ECR I-4921	
12	Case C-99/00 *Lyckeskog* [2002] ECR I-4839	
13	Joined Cases C-397/01 to C-403/01 *Pfeiffer and Others* [2004] ECR I-8835	
14	Case C-350/02 *Commission* v *Netherlands* [2004] ECR I-6213	
15	Case C-461/03 *Gaston Schul Douane-expediteur* [2005] ECR I-10513	
16	Case C-53/03 *Syfait* [2005] ECR I-4609	
17	Case C-304/02 *Commission* v *France* (small fish) [2005] ECR I-6263	
18	Case C-466/04 *Acereda Herrera* [2006] ECR I-5341	
19	Case C-344/04 *IATA and ELFAA* [2006] ECR I-403	

20	Case C-221/04 *Commission* v *Spain* [2006] ECR I-4515	
21	Case C-380/05 *Centro Europa 7* [2008] ECR I-349	
22	Case C-210/06 *Cartesio* [2008] ECR I-9641	
23	Joined Cases C-261/08 and C-348/08 *Zurita García and Choque Cabrera* [2009] ECR I-10143	
24	Case C-445/06 *Danske Slagterier* [2009] I-2119	
25	Joined Cases C-188/10 and C-189/10 *Melki and Abdeli* [2010] ECR I-5667	
26	Case C-240/09 *Lesoochranárske zoskupenie* [2011] ECR I-1255	
27	Case C-282/10 *Dominguez* [2012] ECR I-0000	
28	Case C-374/11 *Commission* v *Ireland* of 19 December 2012	
29	Case C-394/11, *Belov* [2013] ECR I-0000	
	Selected Articles	
30	Ludwig Krämer, Environmental judgments by the Court of Justice and their duration, Journal for European Environmental and Planning Law 2008, 263.	

B. EU Law on Industrial Emissions

	EU Documents: Industrial Emissions	
31	DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions (integrated pollution prevention and control)	
32	DIRECTIVE 2008/1/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2008 concerning integrated pollution prevention and control (Codified version)	
33	DIRECTIVE 2001/80/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants	
34	DIRECTIVE 2000/76/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 December 2000 on the incineration of waste	
35	COUNCIL DIRECTIVE 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations	

36	COUNCIL DIRECTIVE 92/112/EEC of 15 December 1992 on procedures for harmonizing the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry	
37	COUNCIL DIRECTIVE of 3 December 1982 on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry (82/883/EEC)	
38	COUNCIL DIRECTIVE of 20 February 1978 on waste from the titanium dioxide industry (78/176/EEC)	
39	COMMISSION DECISION of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of the Directive 2010/75/EU on industrial emissions (2011/C 146/03)	
	Related EU Documents:	
40	DIRECTIVE 2012/18/EU of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (Seveso III)	
41	DIRECTIVE 2008/50/EC 21 May 2008 on ambient air quality and cleaner air for Europe	
42	DIRECTIVE 2004/107/EC of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (4^{th} daughter directive)	
43	DIRECTIVE 2001/81/EC of 23 October 2001 on national emission ceilings for certain atmospheric pollutants (NEC Directive)	
44	Regulation (EC) No 166/2006 of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC (E-PRTR Regulation)	
45	DIRECTIVE 2011/92/EU of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codification) (EIA-Directive)	
46	Commission Implementing Decision 2012/134/EU for the manufacture of glass	
47	Commission Implementing Decision 2012/135/EU for iron and steel production	
48	Commission Implementing Decision 2013/84/EU for the tanning of hides and skins	
49	Commission Implementing Decision 2013/163/EU for the production of cement, lime and magnesium oxide	

	Related EU Documents: Penalties	
50	COM Study (October 2011): Provisions on penalties related to legislation on industrial installations, Executive Summary	
51	COM Study (October 2011): Overview of provisions on penalties related to legislation on industrial installations in the Member States	
52	COM Study (October 2011): Provisions on penalties related to legislation on industrial installations, Document on Good Practices, October	
	Related Documents: Public participation	
53	The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters of 25 June 1998 (Aarhus Convention)	
54	Directive 2003/35/EC of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC	
55	DIRECTIVE 2003/4/EC of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC	
	Other Documents	
56	The Kolontár Report: CAUSES AND LESSONS FROM THE RED MUD DISASTER, Budapest, March 2011	
	Selected CJEU Case Law	
57	Joined cases C-165/09 to C-167/09, *Stichting Natuur en Milieu and Others v College van Gedeputeerde Staten van Groningen and College van Gedeputeerde Staten van Zuid-Holland*	
58	Case C-473/07, *Association nationale pour la protection des eaux and rivières and OABA* (French poultry case)	
59	Case C-237/07, *Dieter Janecek v Freistaat Bayern*	

A. – TREATY ON THE EUROPEAN UNION

Article 13

1. The Union shall have an institutional framework which shall aim to promote its values, advance its objectives, serve its interests, those of its citizens and those of the Member States, and ensure the consistency, effectiveness and continuity of its policies and actions.

The Union's institutions shall be:

– the European Parliament,

– the European Council,

– the Council,

– the European Commission (hereinafter referred to as 'the Commission'),

– the Court of Justice of the European Union,

– the European Central Bank,

– the Court of Auditors.

2. Each institution shall act within the limits of the powers conferred on it in the Treaties, and in conformity with the procedures, conditions and objectives set out in them. The institutions shall practice mutual sincere cooperation.

3. The provisions relating to the European Central Bank and the Court of Auditors and detailed provisions on the other institutions are set out in the Treaty on the Functioning of the European Union.

4. The European Parliament, the Council and the Commission shall be assisted by an Economic and Social Committee and a Committee of the Regions acting in an advisory capacity.

Article 19

1. The Court of Justice of the European Union shall include the Court of Justice, the General Court and specialised courts. It shall ensure that in the interpretation and application of the Treaties the law is observed.

Member States shall provide remedies sufficient to ensure effective legal protection in the fields covered by Union law.

2. The Court of Justice shall consist of one judge from each Member State. It shall be assisted by Advocates-General.

The General Court shall include at least one judge per Member State.

The Judges and the Advocates-General of the Court of Justice and the Judges of the General Court shall be chosen from persons whose independence is beyond doubt and who satisfy the

conditions set out in Articles 253 and 254 of the Treaty on the Functioning of the European Union. They shall be appointed by common accord of the governments of the Member States for six years. Retiring Judges and Advocates-General may be reappointed.

3. The Court of Justice of the European Union shall, in accordance with the Treaties:

(a) rule on actions brought by a Member State, an institution or a natural or legal person;

(b) give preliminary rulings, at the request of courts or tribunals of the Member States, on the interpretation of Union law or the validity of acts adopted by the institutions;

(c) rule in other cases provided for in the Treaties.

B. – TREATY ON THE FUNCTIONING OF THE EUROPEAN UNION

Article 108
(ex Article 88 TEC)

1. The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the internal market.

2. If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State or through State resources is not compatible with the internal market having regard to Article 107, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission.

If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may, in derogation from the provisions of Articles 258 and 259, refer the matter to the Court of Justice of the European Union direct.

On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or intends to grant shall be considered to be compatible with the internal market, in derogation from the provisions of Article 107 or from the regulations provided for in Article 109, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first subparagraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known.

If, however, the Council has not made its attitude known within three months of the said application being made, the Commission shall give its decision on the case.

3. The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision.

4. The Commission may adopt regulations relating to the categories of State aid that the Council has, pursuant to Article 109, determined may be exempted from the procedure provided for by paragraph 3 of this Article.

Article 218
(ex Article 300 TEC)

1. Without prejudice to the specific provisions laid down in Article 207, agreements between the Union and third countries or international organisations shall be negotiated and concluded in accordance with the following procedure.

2. The Council shall authorise the opening of negotiations, adopt negotiating directives, authorise the signing of agreements and conclude them.

3. The Commission, or the High Representative of the Union for Foreign Affairs and Security Policy where the agreement envisaged relates exclusively or principally to the common foreign and security policy, shall submit recommendations to the Council, which shall adopt a decision authorising the opening of negotiations and, depending on the subject of the agreement envisaged, nominating the Union negotiator or the head of the Union's negotiating team.

4. The Council may address directives to the negotiator and designate a special committee in consultation with which the negotiations must be conducted.

5. The Council, on a proposal by the negotiator, shall adopt a decision authorising the signing of the agreement and, if necessary, its provisional application before entry into force.

6. The Council, on a proposal by the negotiator, shall adopt a decision concluding the agreement.

Except where agreements relate exclusively to the common foreign and security policy, the Council shall adopt the decision concluding the agreement:

(a) after obtaining the consent of the European Parliament in the following cases:

(i) association agreements;

(ii) agreement on Union accession to the European Convention for the Protection of Human Rights and Fundamental Freedoms;

(iii) agreements establishing a specific institutional framework by organising cooperation procedures;

(iv) agreements with important budgetary implications for the Union;

(v) agreements covering fields to which either the ordinary legislative procedure applies, or the special legislative procedure where consent by the European Parliament is required.

The European Parliament and the Council may, in an urgent situation, agree upon a time-limit for consent.

(b) after consulting the European Parliament in other cases. The European Parliament shall deliver its opinion within a time-limit which the Council may set depending on the urgency of the matter. In the absence of an opinion within that time-limit, the Council may act.

7. When concluding an agreement, the Council may, by way of derogation from paragraphs 5, 6 and 9, authorise the negotiator to approve on the Union's behalf modifications to the agreement where it provides for them to be adopted by a simplified procedure or by a body set up by the agreement. The Council may attach specific conditions to such authorisation.

8. The Council shall act by a qualified majority throughout the procedure.

However, it shall act unanimously when the agreement covers a field for which unanimity is required for the adoption of a Union act as well as for association agreements and the agreements referred to in Article 212 with the States which are candidates for accession. The

Council shall also act unanimously for the agreement on accession of the Union to the European Convention for the protection of Human Rights and Fundamental Freedoms; the decision concluding this agreement shall enter into force after it has been approved by the Member States in accordance with their respective constitutional requirements.

9. The Council, on a proposal from the Commission or the High Representative of the Union for Foreign Affairs and Security Policy, shall adopt a decision suspending application of an agreement and establishing the positions to be adopted on the Union's behalf in a body set up by an agreement, when that body is called upon to adopt acts having legal effects, with the exception of acts supplementing or amending the institutional framework of the agreement.

10. The European Parliament shall be immediately and fully informed at all stages of the procedure.

11. A Member State, the European Parliament, the Council or the Commission may obtain the opinion of the Court of Justice as to whether an agreement envisaged is compatible with the Treaties. Where the opinion of the Court is adverse, the agreement envisaged may not enter into force unless it is amended or the Treaties are revised.

Article 251
(ex Article 221 TEC)

The Court of Justice shall sit in chambers or in a Grand Chamber, in accordance with the rules laid down for that purpose in the Statute of the Court of Justice of the European Union.

When provided for in the Statute, the Court of Justice may also sit as a full Court.

Article 252
(ex Article 222 TEC)

The Court of Justice shall be assisted by eight Advocates-General. Should the Court of Justice so request, the Council, acting unanimously, may increase the number of Advocates-General.

It shall be the duty of the Advocate-General, acting with complete impartiality and independence, to make, in open court, reasoned submissions on cases which, in accordance with the Statute of the Court of Justice of the European Union, require his involvement.

Article 253
(ex Article 223 TEC)

The Judges and Advocates-General of the Court of Justice shall be chosen from persons whose independence is beyond doubt and who possess the qualifications required for appointment to the highest judicial offices in their respective countries or who are jurisconsults of recognised competence; they shall be appointed by common accord of the governments of the Member States for a term of six years, after consultation of the panel provided for in Article 255.

Every three years there shall be a partial replacement of the Judges and Advocates-General, in accordance with the conditions laid down in the Statute of the Court of Justice of the European Union.

The Judges shall elect the President of the Court of Justice from among their number for a term of three years. He may be re-elected.

Retiring Judges and Advocates-General may be reappointed.

The Court of Justice shall appoint its Registrar and lay down the rules governing his service.

The Court of Justice shall establish its Rules of Procedure. Those Rules shall require the approval of the Council.

Article 254
(ex Article 224 TEC)

The number of Judges of the General Court shall be determined by the Statute of the Court of Justice of the European Union. The Statute may provide for the General Court to be assisted by Advocates-General.

The members of the General Court shall be chosen from persons whose independence is beyond doubt and who possess the ability required for appointment to high judicial office. They shall be appointed by common accord of the governments of the Member States for a term of six years, after consultation of the panel provided for in Article 255. The membership shall be partially renewed every three years. Retiring members shall be eligible for reappointment.

The Judges shall elect the President of the General Court from among their number for a term of three years. He may be re-elected.

The General Court shall appoint its Registrar and lay down the rules governing his service.

The General Court shall establish its Rules of Procedure in agreement with the Court of Justice. Those Rules shall require the approval of the Council.

Unless the Statute of the Court of Justice of the European Union provides otherwise, the provisions of the Treaties relating to the Court of Justice shall apply to the General Court.

Article 255

A panel shall be set up in order to give an opinion on candidates' suitability to perform the duties of Judge and Advocate-General of the Court of Justice and the General Court before the governments of the Member States make the appointments referred to in Articles 253 and 254.

The panel shall comprise seven persons chosen from among former members of the Court of Justice and the General Court, members of national supreme courts and lawyers of recognised competence, one of whom shall be proposed by the European Parliament. The Council shall adopt a decision establishing the panel's operating rules and a decision appointing its members. It shall act on the initiative of the President of the Court of Justice.

Article 256
(ex Article 225 TEC)

1. The General Court shall have jurisdiction to hear and determine at first instance actions or proceedings referred to in Articles 263, 265, 268, 270 and 272, with the exception of those

assigned to a specialised court set up under Article 257 and those reserved in the Statute for the Court of Justice. The Statute may provide for the General Court to have jurisdiction for other classes of action or proceeding.

Decisions given by the General Court under this paragraph may be subject to a right of appeal to the Court of Justice on points of law only, under the conditions and within the limits laid down by the Statute.

2. The General Court shall have jurisdiction to hear and determine actions or proceedings brought against decisions of the specialised courts.

Decisions given by the General Court under this paragraph may exceptionally be subject to review by the Court of Justice, under the conditions and within the limits laid down by the Statute, where there is a serious risk of the unity or consistency of Union law being affected.

3. The General Court shall have jurisdiction to hear and determine questions referred for a preliminary ruling under Article 267, in specific areas laid down by the Statute.

Where the General Court considers that the case requires a decision of principle likely to affect the unity or consistency of Union law, it may refer the case to the Court of Justice for a ruling.

Decisions given by the General Court on questions referred for a preliminary ruling may exceptionally be subject to review by the Court of Justice, under the conditions and within the limits laid down by the Statute, where there is a serious risk of the unity or consistency of Union law being affected.

Article 257
(ex Article 225A TEC)

The European Parliament and the Council, acting in accordance with the ordinary legislative procedure, may establish specialised courts attached to the General Court to hear and determine at first instance certain classes of action or proceeding brought in specific areas. The European Parliament and the Council shall act by means of regulations either on a proposal from the Commission after consultation of the Court of Justice or at the request of the Court of Justice after consultation of the Commission.

The regulation establishing a specialised court shall lay down the rules on the organisation of the court and the extent of the jurisdiction conferred upon it.

Decisions given by specialised courts may be subject to a right of appeal on points of law only or, when provided for in the regulation establishing the specialised court, a right of appeal also on matters of fact, before the General Court.

The members of the specialised courts shall be chosen from persons whose independence is beyond doubt and who possess the ability required for appointment to judicial office. They shall be appointed by the Council, acting unanimously.

The specialised courts shall establish their Rules of Procedure in agreement with the Court of Justice. Those Rules shall require the approval of the Council.

Unless the regulation establishing the specialised court provides otherwise, the provisions of the Treaties relating to the Court of Justice of the European Union and the provisions of the Statute of the Court of Justice of the European Union shall apply to the specialised courts. Title I of the Statute and Article 64 thereof shall in any case apply to the specialised courts.

Article 258
(ex Article 226 TEC)

If the Commission considers that a Member State has failed to fulfil an obligation under the Treaties, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations.

If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice of the European Union.

Article 259
(ex Article 227 TEC)

A Member State which considers that another Member State has failed to fulfil an obligation under the Treaties may bring the matter before the Court of Justice of the European Union.

Before a Member State brings an action against another Member State for an alleged infringement of an obligation under the Treaties, it shall bring the matter before the Commission.

The Commission shall deliver a reasoned opinion after each of the States concerned has been given the opportunity to submit its own case and its observations on the other party's case both orally and in writing.

If the Commission has not delivered an opinion within three months of the date on which the matter was brought before it, the absence of such opinion shall not prevent the matter from being brought before the Court.

Article 260
(ex Article 228 TEC)

1. If the Court of Justice of the European Union finds that a Member State has failed to fulfil an obligation under the Treaties, the State shall be required to take the necessary measures to comply with the judgment of the Court.

2. If the Commission considers that the Member State concerned has not taken the necessary measures to comply with the judgment of the Court, it may bring the case before the Court after giving that State the opportunity to submit its observations. It shall specify the amount of the lump sum or penalty payment to be paid by the Member State concerned which it considers appropriate in the circumstances.

If the Court finds that the Member State concerned has not complied with its judgment it may impose a lump sum or penalty payment on it.

This procedure shall be without prejudice to Article 259.

3. When the Commission brings a case before the Court pursuant to Article 258 on the grounds that the Member State concerned has failed to fulfil its obligation to notify measures transposing a directive adopted under a legislative procedure, it may, when it deems appropriate, specify the amount of the lump sum or penalty payment to be paid by the Member State concerned which it considers appropriate in the circumstances.

If the Court finds that there is an infringement it may impose a lump sum or penalty payment on the Member State concerned not exceeding the amount specified by the Commission. The payment obligation shall take effect on the date set by the Court in its judgment.

Article 261
(ex Article 229 TEC)

Regulations adopted jointly by the European Parliament and the Council, and by the Council, pursuant to the provisions of the Treaties, may give the Court of Justice of the European Union unlimited jurisdiction with regard to the penalties provided for in such regulations.

Article 262
(ex Article 229 A TEC)

Without prejudice to the other provisions of the Treaties, the Council, acting unanimously in accordance with a special legislative procedure and after consulting the European Parliament, may adopt provisions to confer jurisdiction, to the extent that it shall determine, on the Court of Justice of the European Union in disputes relating to the application of acts adopted on the basis of the Treaties which create European intellectual property rights. These provisions shall enter into force after their approval by the Member States in accordance with their respective constitutional requirements.

Article 263
(ex Article 230 TEC)

The Court of Justice of the European Union shall review the legality of legislative acts, of acts of the Council, of the Commission and of the European Central Bank, other than recommendations and opinions, and of acts of the European Parliament and of the European Council intended to produce legal effects vis-à-vis third parties. It shall also review the legality of acts of bodies, offices or agencies of the Union intended to produce legal effects vis-à-vis third parties.

It shall for this purpose have jurisdiction in actions brought by a Member State, the European Parliament, the Council or the Commission on grounds of lack of competence, infringement of an essential procedural requirement, infringement of the Treaties or of any rule of law relating to their application, or misuse of powers.

The Court shall have jurisdiction under the same conditions in actions brought by the Court of Auditors, by the European Central Bank and by the Committee of the Regions for the purpose of protecting their prerogatives.

Any natural or legal person may, under the conditions laid down in the first and second paragraphs, institute proceedings against an act addressed to that person or which is of direct and individual concern to them, and against a regulatory act which is of direct concern to them and does not entail implementing measures.

Acts setting up bodies, offices and agencies of the Union may lay down specific conditions and arrangements concerning actions brought by natural or legal persons against acts of these bodies, offices or agencies intended to produce legal effects in relation to them.

The proceedings provided for in this Article shall be instituted within two months of the publication of the measure, or of its notification to the plaintiff, or, in the absence thereof, of the day on which it came to the knowledge of the latter, as the case may be.

Article 264
(ex Article 231 TEC)

If the action is well founded, the Court of Justice of the European Union shall declare the act concerned to be void.

However, the Court shall, if it considers this necessary, state which of the effects of the act which it has declared void shall be considered as definitive.

Article 265
(ex Article 232 TEC)

Should the European Parliament, the European Council, the Council, the Commission or the European Central Bank, in infringement of the Treaties, fail to act, the Member States and the other institutions of the Union may bring an action before the Court of Justice of the European Union to have the infringement established. This Article shall apply, under the same conditions, to bodies, offices and agencies of the Union which fail to act.

The action shall be admissible only if the institution, body, office or agency concerned has first been called upon to act. If, within two months of being so called upon, the institution, body, office or agency concerned has not defined its position, the action may be brought within a further period of two months.

Any natural or legal person may, under the conditions laid down in the preceding paragraphs, complain to the Court that an institution, body, office or agency of the Union has failed to address to that person any act other than a recommendation or an opinion.

Article 266
(ex Article 233 TEC)

The institution whose act has been declared void or whose failure to act has been declared contrary to the Treaties shall be required to take the necessary measures to comply with the judgment of the Court of Justice of the European Union.

This obligation shall not affect any obligation which may result from the application of the second paragraph of Article 340.

Article 267
(ex Article 234 TEC)

The Court of Justice of the European Union shall have jurisdiction to give preliminary rulings concerning:

(a) the interpretation of the Treaties;

b) the validity and interpretation of acts of the institutions, bodies, offices or agencies of the Union;

Where such a question is raised before any court or tribunal of a Member State, that court or tribunal may, if it considers that a decision on the question is necessary to enable it to give judgment, request the Court to give a ruling thereon.

Where any such question is raised in a case pending before a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law, that court or tribunal shall bring the matter before the Court.

If such a question is raised in a case pending before a court or tribunal of a Member State with regard to a person in custody, the Court of Justice of the European Union shall act with the minimum of delay.

Article 268
(ex Article 235 TEC)

The Court of Justice of the European Union shall have jurisdiction in disputes relating to compensation for damage provided for in the second and third paragraphs of Article 340.

Article 269

The Court of Justice shall have jurisdiction to decide on the legality of an act adopted by the European Council or by the Council pursuant to Article 7 of the Treaty on European Union solely at the request of the Member State concerned by a determination of the European Council or of the Council and in respect solely of the procedural stipulations contained in that Article.

Such a request must be made within one month from the date of such determination. The Court shall rule within one month from the date of the request.

Article 270
(ex Article 236 TEC)

The Court of Justice of the European Union shall have jurisdiction in any dispute between the Union and its servants within the limits and under the conditions laid down in the Staff Regulations of Officials and the Conditions of Employment of other servants of the Union.

Article 271
(ex Article 237 TEC)

The Court of Justice of the European Union shall, within the limits hereinafter laid down, have jurisdiction in disputes concerning:

(a) the fulfilment by Member States of obligations under the Statute of the European Investment Bank. In this connection, the Board of Directors of the Bank shall enjoy the powers conferred upon the Commission by Article 258;

(b) measures adopted by the Board of Governors of the European Investment Bank. In this connection, any Member State, the Commission or the Board of Directors of the Bank may institute proceedings under the conditions laid down in Article 263;

(c) measures adopted by the Board of Directors of the European Investment Bank. Proceedings against such measures may be instituted only by Member States or by the Commission, under the conditions laid down in Article 263, and solely on the grounds of non-compliance with the procedure provided for in Article 19(2), (5), (6) and (7) of the Statute of the Bank;

(d) the fulfilment by national central banks of obligations under the Treaties and the Statute of the ESCB and of the ECB. In this connection the powers of the Governing Council of the European Central Bank in respect of national central banks shall be the same as those conferred upon the Commission in respect of Member States by Article 258. If the Court finds that a national central bank has failed to fulfil an obligation under the Treaties, that bank shall be required to take the necessary measures to comply with the judgment of the Court.

Article 272
(ex Article 238 TEC)

The Court of Justice of the European Union shall have jurisdiction to give judgment pursuant to any arbitration clause contained in a contract concluded by or on behalf of the Union, whether that contract be governed by public or private law.

Article 273
(ex Article 239 TEC)

The Court of Justice shall have jurisdiction in any dispute between Member States which relates to the subject matter of the Treaties if the dispute is submitted to it under a special agreement between the parties.

Article 274
(ex Article 240 TEC)

Save where jurisdiction is conferred on the Court of Justice of the European Union by the Treaties, disputes to which the Union is a party shall not on that ground be excluded from the jurisdiction of the courts or tribunals of the Member States.

Article 275

The Court of Justice of the European Union shall not have jurisdiction with respect to the provisions relating to the common foreign and security policy nor with respect to acts adopted on the basis of those provisions.

However, the Court shall have jurisdiction to monitor compliance with Article 40 of the Treaty on European Union and to rule on proceedings, brought in accordance with the conditions laid down in the fourth paragraph of Article 263 of this Treaty, reviewing the legality of decisions providing for restrictive measures against natural or legal persons adopted by the Council on the basis of Chapter 2 of Title V of the Treaty on European Union.

Article 276

In exercising its powers regarding the provisions of Chapters 4 and 5 of Title V of Part Three relating to the area of freedom, security and justice, the Court of Justice of the European Union shall have no jurisdiction to review the validity or proportionality of operations carried out by the police or other law-enforcement services of a Member State or the exercise of the responsibilities incumbent upon Member States with regard to the maintenance of law and order and the safeguarding of internal security.

Article 277
(ex Article 241 TEC)

Notwithstanding the expiry of the period laid down in Article 263, sixth paragraph, any party may, in proceedings in which an act of general application adopted by an institution, body, office or agency of the Union is at issue, plead the grounds specified in Article 263, second paragraph, in order to invoke before the Court of Justice of the European Union the inapplicability of that act.

Article 278
(ex Article 242 TEC)

Actions brought before the Court of Justice of the European Union shall not have suspensory effect. The Court may, however, if it considers that circumstances so require, order that application of the contested act be suspended.

Article 279
(ex Article 243 TEC)

The Court of Justice of the European Union may in any cases before it prescribe any necessary interim measures.

Article 280
(ex Article 244 TEC)

The judgments of the Court of Justice of the European Union shall be enforceable under the conditions laid down in Article 299.

Article 281
(ex Article 245 TEC)

The Statute of the Court of Justice of the European Union shall be laid down in a separate Protocol.

The European Parliament and the Council, acting in accordance with the ordinary legislative procedure, may amend the provisions of the Statute, with the exception of Title I and Article 64. The European Parliament and the Council shall act either at the request of the Court of Justice and after consultation of the Commission, or on a proposal from the Commission and after consultation of the Court of Justice.

Article 299
(ex Article 256 TEC)

Acts of the Council, the Commission or the European Central Bank which impose a pecuniary obligation on persons other than States, shall be enforceable.

Enforcement shall be governed by the rules of civil procedure in force in the State in the territory of which it is carried out. The order for its enforcement shall be appended to the decision, without other formality than verification of the authenticity of the decision, by the national authority which the government of each Member State shall designate for this purpose and shall make known to the Commission and to the Court of Justice of the European Union.

When these formalities have been completed on application by the party concerned, the latter may proceed to enforcement in accordance with the national law, by bringing the matter directly before the competent authority. Enforcement may be suspended only by a decision of the Court. However, the courts of the country concerned shall have jurisdiction over complaints that enforcement is being carried out in an irregular manner.

Article 340
(ex Article 288 TEC)

The contractual liability of the Union shall be governed by the law applicable to the contract in question.

In the case of non-contractual liability, the Union shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its institutions or by its servants in the performance of their duties.

Notwithstanding the second paragraph, the European Central Bank shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by it or by its servants in the performance of their duties.

The personal liability of its servants towards the Union shall be governed by the provisions laid down in their Staff Regulations or in the Conditions of Employment applicable to them.

C. – TREATY ESTABLISHING THE EUROPEAN ATOMIC ENERGY COMMUNITY

Article 12

Member States, persons or undertakings shall have the right, on application to the Commission, to obtain non-exclusive licences under patents, provisionally protected patent rights, utility models or patent applications owned by the Community, where they are able to make effective use of the inventions covered thereby.

Under the same conditions, the Commission shall grant sublicences under patents, provisionally protected patent rights, utility models or patent applications, where the Community holds contractual licences conferring power to do so.

The Commission shall grant such licences or sublicences on terms to be agreed with the licensees and shall furnish all the information required for their use. These terms shall relate in particular to suitable remuneration and, where appropriate, to the right of the licensee to grant sublicences to third parties and to the obligation to treat the information as a trade secret.

Failing agreement on the terms referred to in the third paragraph, the licensees may bring the matter before the Court of Justice of the European Union so that appropriate terms may be fixed.

Article 18

An Arbitration Committee is hereby established for the purposes provided for in this Section. The Council shall appoint the members and lay down the Rules of Procedure of this Committee, acting on a proposal from the Court of Justice of the European Union.

An appeal, having suspensory effect, may be brought by the parties before the Court of Justice of the European Union against a decision of the Arbitration Committee within one month of notification thereof. The Court of Justice of the European Union shall confine its examination to the formal validity of the decision and to the interpretation of the provisions of this Treaty by the Arbitration Committee.

The final decisions of the Arbitration Committee shall have the force of res judicata between the parties concerned. They shall be enforceable as provided in Article 164.

Article 21

If the proprietor does not propose that the matter be referred to the Arbitration Committee, the Commission may call upon the Member State concerned or its appropriate authorities to grant the licence or cause it to be granted.

If, having heard the proprietor's case, the Member State, or its appropriate authorities, considers that the conditions of Article 17 have not been complied with, it shall notify the Commission of its refusal to grant the licence or to cause it to be granted.

If it refuses to grant the licence or to cause it to be granted, or if, within four months of the date of the request, no information is forthcoming with regard to the granting of the licence, the Commission shall have two months in which to bring the matter before the Court of Justice of the European Union.

The proprietor must be heard in the proceedings before the Court of Justice of the European Union.

If the judgment of the Court of Justice of the European Union establishes that the conditions of Article 17 have been complied with, the Member State concerned, or its appropriate authorities, shall take such measures as enforcement of that judgment may require.

Article 81

The Commission may send inspectors into the territories of Member States. Before sending an inspector on his first assignment in the territory of a Member State, the Commission shall consult the State concerned; such consultation shall suffice to cover all future assignments of this inspector.

On presentation of a document establishing their authority, inspectors shall at all times have access to all places and data and to all persons who, by reason of their occupation, deal with materials, equipment or installations subject to the safeguards provided for in this Chapter, to the extent necessary in order to apply such safeguards to ores, source materials and special fissile materials and to ensure compliance with the provisions of Article 77. Should the State concerned so request, inspectors appointed by the Commission shall be accompanied by representatives of the authorities of that State; however, the inspectors shall not thereby be delayed or otherwise impeded in the performance of their duties.

If the carrying out of an inspection is opposed, the Commission shall apply to the President of the Court of Justice of the European Union for an order to ensure that the inspection be carried out compulsorily. The President of the Court of Justice of the European Union shall give a decision within three days.

If there is danger in delay, the Commission may itself issue a written order, in the form of a decision, to proceed with the inspection. This order shall be submitted without delay to the President of the Court of Justice of the European Union for subsequent approval.

After the order or decision has been issued, the authorities of the State concerned shall ensure that the inspectors have access to the places specified in the order or decision.

Article 82

Inspectors shall be recruited by the Commission.

They shall be responsible for obtaining and verifying the records referred to in Article 79. They shall report any infringement to the Commission.

The Commission may issue a directive calling upon the Member State concerned to take, by a time limit set by the Commission, all measures necessary to bring such infringement to an end; it shall inform the Council thereof.

If the Member State does not comply with the Commission directive by the time limit set, the Commission or any Member State concerned may, in derogation from Articles 226 and 227 of the Treaty on the Functioning of the European Union, refer the matter to the Court of Justice of the European Union direct.

Article 83

1. In the event of an infringement on the part of persons or undertakings of the obligations imposed on them by this Chapter, the Commission may impose sanctions on such persons or undertakings.

These sanctions shall be in order of severity:

(a) a warning;

(b) the withdrawal of special benefits such as financial or technical assistance;

(c) the placing of the undertaking for a period not exceeding four months under the administration of a person or board appointed by common accord of the Commission and the State having jurisdiction over the undertaking;

(d) total or partial withdrawal of source materials or special fissile materials.

2. Decisions taken by the Commission in implementation of paragraph 1 and requiring the surrender of materials shall be enforceable. They may be enforced in the territories of Member States in accordance with Article 164.

By way of derogation from Article 157, appeals brought before the Court of Justice of the European Union against decisions of the Commission which impose any of the sanctions provided for in paragraph 1 shall have suspensory effect. The Court of Justice of the European Union may, however, on application by the Commission or by any Member State concerned, order that the decision be enforced forthwith.

There shall be an appropriate legal procedure to ensure the protection of interests that have been prejudiced.

3. The Commission may make any recommendations to Member States concerning laws or regulations which are designed to ensure compliance in their territories with the obligations arising under this Chapter.

4. Member States shall ensure that sanctions are enforced and, where necessary, that the infringements are remedied by those committing them.

Article 103

Member States shall communicate to the Commission draft agreements or contracts with a third State, an international organisation or a national of a third State to the extent that such agreements or contracts concern matters within the purview of this Treaty.

If a draft agreement or contract contains clauses which impede the application of this Treaty, the Commission shall, within one month of receipt of such communication, make its comments known to the State concerned.

The State shall not conclude the proposed agreement or contract until it has satisfied the objections of the Commission or complied with a ruling by the Court of Justice of the European

Union, adjudicating urgently upon an application from the State, on the compatibility of the proposed clauses with the provisions of this Treaty. An application may be made to the Court of Justice of the European Union at any time after the State has received the comments of the Commission.

Article 104

No person or undertaking concluding or renewing an agreement or contract with a third State, an international organisation the date of their accession, may invoke that agreement or contract in order to evade the obligations imposed by this Treaty.

Each Member State shall take such measures as it considers necessary in order to communicate to the Commission, at the request of the latter, all information relating to agreements or contracts concluded after the dates referred to in the first paragraph, within the scope of this Treaty, by a person or undertaking with a third State, an international organisation or a national of a third State. The Commission may require such communication only for the purpose of verifying that such agreements or contracts do not contain clauses impeding the implementation of this Treaty.

On application by the Commission, the Court of Justice of the European Union shall give a ruling on the compatibility of such agreements or contracts with the provisions of this Treaty.

Article 105

The provisions of this Treaty shall not be invoked so as to prevent the implementation of agreements or contracts concluded before 1 January 1958 or, for acceding States, before the date of their accession, by a Member State, a person or an undertaking with a third State, an international organisation or a national of a third State where such agreements or contracts have been communicated to the Commission not later than 30 days after the aforesaid dates.

Agreements or contracts concluded between 25 March 1957 and 1 January 1958 or, for acceding States, between the signature of the instrument of accession and the date of their accession, by a person or an undertaking with a third State, an international organisation or a national of a third State shall not, however, be invoked as grounds for failure to implement this Treaty if, in the opinion of the Court of Justice of the European Union, ruling on an application from the Commission, one of the decisive reasons on the part of either of the parties in concluding the agreement or contract was an intention to evade the provisions of this Treaty.

Article 106a

1. Article 7, Articles 9 to 9F, Article 48(2) to (5), and Articles 49 and 49A of the Treaty on European Union, Article 16A, Articles 190 to 201b, Articles 204 to 211a, Article 213, Articles 215 to 236, Articles 238, 239 and 240, Articles 241 to 245, Articles 246 to 262, Articles 268 to 277, Articles 279 to 280 and Articles 283, 290 and 292 of the Treaty on the Functioning of the European Union, and the Protocol on Transitional Provisions, shall apply to this Treaty.

2. Within the framework of this Treaty, the references to the Union, to the ‘Treaty on European Union’, to the ‘Treaty on the Functioning of the European Union’ or to the ‘Treaties’ in the provisions referred to in paragraph 1 and those in the protocols annexed both to those Treaties and to this Treaty shall be taken, respectively, as references to the European Atomic Energy Community and to this Treaty.

3. The provisions of the Treaty on European Union and of the Treaty on the Functioning of the European Union shall not derogate from the provisions of this Treaty.

Article 144

The Court of Justice of the European Union shall have unlimited jurisdiction in:

(a) proceedings instituted under Article 12 to have the appropriate terms fixed for the granting by the Commission of licences or sub licences;

(b) proceedings instituted by persons or undertakings against sanctions imposed on them by the Commission under Article 83.

Article 145

If the Commission considers that a person or undertaking has committed an infringement of this Treaty to which the provisions of Article 83 do not apply, it shall call upon the Member State having jurisdiction over that person or undertaking to cause sanctions to be imposed in respect of the infringement in accordance with its national law.

If the State concerned does not comply with such a request within the period laid down by the Commission, the latter may bring an action before the Court of Justice of the European Union to have the infringement of which the person or undertaking is accused established.

Article 157

Save as otherwise provided in this Treaty, actions brought before the Court of Justice of the European Union shall not have suspensory effect. The Court of Justice of the European Union may, however, if it considers that circumstances so require, order that application of the contested act be suspended.

Article 188

The contractual liability of the Community shall be governed by the law applicable to the contract in question.

In the case of non-contractual liability, the Community shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its institutions or by its servants in the performance of their duties.

The personal liability of its servants towards the Community shall be governed by the provisions laid down in the Staff Regulations or in the Conditions of Employment applicable to them.

STATUTE OF THE COURT OF JUSTICE OF THE EUROPEAN UNION

THE HIGH CONTRACTING PARTIES,

DESIRING to lay down the Statute of the Court of Justice of the European Union provided for in Article 281 of the Treaty on the Functioning of the European Union,

HAVE AGREED UPON the following provisions, which shall be annexed to the Treaty on European Union, the Treaty on the Functioning of the European Union and the Treaty establishing the European Atomic Energy Community:

Article 1

The Court of Justice of the European Union shall be constituted and shall function in accordance with the provisions of the Treaties, of the Treaty establishing the European Atomic Energy Community (EAEC Treaty) and of this Statute.

TITLE I

JUDGES AND ADVOCATES-GENERAL

Article 2

Before taking up his duties each Judge shall, before the Court of Justice sitting in open court, take an oath to perform his duties impartially and conscientiously and to preserve the secrecy of the deliberations of the Court.

Article 3

The Judges shall be immune from legal proceedings. After they have ceased to hold office, they shall continue to enjoy immunity in respect of acts performed by them in their official capacity, including words spoken or written.

The Court of Justice, sitting as a full Court, may waive the immunity. If the decision concerns a member of the General Court or of a specialised court, the Court shall decide after consulting the court concerned.

Where immunity has been waived and criminal proceedings are instituted against a Judge, he shall be tried, in any of the Member States, only by the court competent to judge the members of the highest national judiciary.

Articles 11 to 14 and Article 17 of the Protocol on the privileges and immunities of the European Union shall apply to the Judges, Advocates-General, Registrar and Assistant Rapporteurs of the Court of Justice of the European Union, without prejudice to the provisions relating to immunity from legal proceedings of Judges which are set out in the preceding paragraphs.

Article 4

The Judges may not hold any political or administrative office.

They may not engage in any occupation, whether gainful or not, unless exemption is exceptionally granted by the Council, acting by a simple majority.

When taking up their duties, they shall give a solemn undertaking that, both during and after their term of office, they will respect the obligations arising therefrom, in particular the duty to behave with integrity and discretion as regards the acceptance, after they have ceased to hold office, of certain appointments or benefits.

Any doubt on this point shall be settled by decision of the Court of Justice. If the decision concerns a member of the General Court or of a specialised court, the Court shall decide after consulting the court concerned.

Article 5

Apart from normal replacement, or death, the duties of a Judge shall end when he resigns.

Where a Judge resigns, his letter of resignation shall be addressed to the President of the Court of Justice for transmission to the President of the Council. Upon this notification a vacancy shall arise on the bench.

Save where Article 6 applies, a Judge shall continue to hold office until his successor takes up his duties.

Article 6

A Judge may be deprived of his office or of his right to a pension or other benefits in its stead only if, in the unanimous opinion of the Judges and Advocates-General of the Court of Justice, he no longer fulfils the requisite conditions or meets the obligations arising from his office. The Judge concerned shall not take part in any such deliberations. If the person concerned is a member of the General Court or of a specialised court, the Court shall decide after consulting the court concerned.

The Registrar of the Court shall communicate the decision of the Court to the President of the European Parliament and to the President of the Commission and shall notify it to the President of the Council.

In the case of a decision depriving a Judge of his office, a vacancy shall arise on the bench upon this latter notification.

Article 7

A Judge who is to replace a member of the Court whose term of office has not expired shall be appointed for the remainder of his predecessor's term.

Article 8

The provisions of Articles 2 to 7 shall apply to the Advocates-General.

TITLE II

ORGANISATION OF THE COURT OF JUSTICE

Article 9

When, every three years, the Judges are partially replaced, 14 and 13 Judges shall be replaced alternately.

When, every three years, the Advocates-General are partially replaced, four Advocates-General shall be replaced on each occasion.

Article 10

The Registrar shall take an oath before the Court of Justice to perform his duties impartially and conscientiously and to preserve the secrecy of the deliberations of the Court of Justice.

Article 11

The Court of Justice shall arrange for replacement of the Registrar on occasions when he is prevented from attending the Court of Justice.

Article 12

Officials and other servants shall be attached to the Court of Justice to enable it to function. They shall be responsible to the Registrar under the authority of the President.

Article 13

At the request of the Court of Justice, the European Parliament and the Council may, acting in accordance with the ordinary legislative procedure, provide for the appointment of Assistant Rapporteurs and lay down the rules governing their service. The Assistant Rapporteurs may be required, under conditions laid down in the Rules of Procedure, to participate in preparatory inquiries in cases pending before the Court and to cooperate with the Judge who acts as Rapporteur.

The Assistant Rapporteurs shall be chosen from persons whose independence is beyond doubt and who possess the necessary legal qualifications; they shall be appointed by the Council, acting by a simple majority. They shall take an oath before the Court to perform their duties impartially and conscientiously and to preserve the secrecy of the deliberations of the Court.

Article 14

The Judges, the Advocates-General and the Registrar shall be required to reside at the place where the Court of Justice has its seat.

Article 15

The Court of Justice shall remain permanently in session. The duration of the judicial vacations shall be determined by the Court with due regard to the needs of its business.

Article 16

The Court of Justice shall form chambers consisting of three and five Judges. The Judges shall elect the Presidents of the chambers from among their number. The Presidents of the chambers of five Judges shall be elected for three years. They may be re-elected once.

The Grand Chamber shall consist of 13 Judges. It shall be presided over by the President of the Court. The Presidents of the chambers of five Judges and other Judges appointed in accordance with the conditions laid down in the Rules of Procedure shall also form part of the Grand Chamber.

The Court shall sit in a Grand Chamber when a Member State or an institution of the Union that is party to the proceedings so requests.

The Court shall sit as a full Court where cases are brought before it pursuant to Article 228(2), Article 245(2), Article 247 or Article 286(6) of the Treaty on the Functioning of the European Union.

Moreover, where it considers that a case before it is of exceptional importance, the Court may decide, after hearing the Advocate-General, to refer the case to the full Court.

Article 17

Decisions of the Court of Justice shall be valid only when an uneven number of its members is sitting in the deliberations.

Decisions of the chambers consisting of either three or five Judges shall be valid only if they are taken by three Judges.

Decisions of the Grand Chamber shall be valid only if nine Judges are sitting.

Decisions of the full Court shall be valid only if 15 Judges are sitting.

In the event of one of the Judges of a chamber being prevented from attending, a Judge of another chamber may be called upon to sit in accordance with conditions laid down in the Rules of Procedure.

Article 18

No Judge or Advocate-General may take part in the disposal of any case in which he has previously taken part as agent or adviser or has acted for one of the parties, or in which he has been called upon to pronounce as a member of a court or tribunal, of a commission of inquiry or in any other capacity.

If, for some special reason, any Judge or Advocate-General considers that he should not take part in the judgment or examination of a particular case, he shall so inform the President. If, for some special reason, the President considers that any Judge or Advocate-General should not sit or make submissions in a particular case, he shall notify him accordingly.

Any difficulty arising as to the application of this Article shall be settled by decision of the Court of Justice.

A party may not apply for a change in the composition of the Court or of one of its chambers on the grounds of either the nationality of a Judge or the absence from the Court or from the chamber of a Judge of the nationality of that party.

TITLE III

PROCEDURE BEFORE THE COURT OF JUSTICE

Article 19

The Member States and the institutions of the Union shall be represented before the Court of Justice by an agent appointed for each case; the agent may be assisted by an adviser or by a lawyer.

The States, other than the Member States, which are parties to the Agreement on the European Economic Area and also the EFTA Surveillance Authority referred to in that Agreement shall be represented in same manner.

Other parties must be represented by a lawyer.

Only a lawyer authorised to practise before a court of a Member State or of another State which is a party to the Agreement on the European Economic Area may represent or assist a party before the Court.

Such agents, advisers and lawyers shall, when they appear before the Court, enjoy the rights and immunities necessary to the independent exercise of their duties, under conditions laid down in the Rules of Procedure.

As regards such advisers and lawyers who appear before it, the Court shall have the powers normally accorded to courts of law, under conditions laid down in the Rules of Procedure.

University teachers being nationals of a Member State whose law accords them a right of audience shall have the same rights before the Court as are accorded by this Article to lawyers.

Article 20

The procedure before the Court of Justice shall consist of two parts: written and oral.

The written procedure shall consist of the communication to the parties and to the institutions of the Union whose decisions are in dispute, of applications, statements of case, defences and observations, and of replies, if any, as well as of all papers and documents in support or of certified copies of them.

Communications shall be made by the Registrar in the order and within the time laid down in the Rules of Procedure.

The oral procedure shall consist of the reading of the report presented by a Judge acting as Rapporteur, the hearing by the Court of agents, advisers and lawyers and of the submissions of the Advocate-General, as well as the hearing, if any, of witnesses and experts.

Where it considers that the case raises no new point of law, the Court may decide, after hearing the Advocate-General, that the case shall be determined without a submission from the Advocate-General.

Article 21

A case shall be brought before the Court of Justice by a written application addressed to the Registrar. The application shall contain the applicant's name and permanent address and the description of the signatory, the name of the party or names of the parties against whom the application is made, the subject-matter of the dispute, the form of order sought and a brief statement of the pleas in law on which the application is based.

The application shall be accompanied, where appropriate, by the measure the annulment of which is sought or, in the circumstances referred to in Article 265 of the Treaty on the Functioning of the European Union, by documentary evidence of the date on which an institution was, in accordance with those Articles, requested to act. If the documents are not submitted with the application, the Registrar shall ask the party concerned to produce them within a reasonable period, but in that event the rights of the party shall not lapse even if such documents are produced after the time limit for bringing proceedings.

Article 22

A case governed by Article 18 of the EAEC Treaty shall be brought before the Court of Justice by an appeal addressed to the Registrar. The appeal shall contain the name and permanent address of the applicant and the description of the signatory, a reference to the decision against which the appeal is brought, the names of the respondents, the subject-matter of the dispute, the submissions and a brief statement of the grounds on which the appeal is based.

The appeal shall be accompanied by a certified copy of the decision of the Arbitration Committee which is contested.

If the Court rejects the appeal, the decision of the Arbitration Committee shall become final.

If the Court annuls the decision of the Arbitration Committee, the matter may be re-opened, where appropriate, on the initiative of one of the parties in the case, before the Arbitration Committee. The latter shall conform to any decisions on points of law given by the Court.

Article 23

In the cases governed by Article 267 of the Treaty on the Functioning of the European Union, the decision of the court or tribunal of a Member State which suspends its proceedings and refers a case to the Court of Justice shall be notified to the Court by the court or tribunal concerned. The decision shall then be notified by the Registrar of the Court to the parties, to the Member States and to the Commission, and to the institution, body, office or agency of the Union which adopted the act the validity or interpretation of which is in dispute.

Within two months of this notification, the parties, the Member States, the Commission and, where appropriate, the institution, body, office or agency which adopted the act the validity or interpretation of which is in dispute, shall be entitled to submit statements of case or written observations to the Court.

In the cases governed by Article 267 of the Treaty on the Functioning of the European Union, the decision of the national court or tribunal shall, moreover, be notified by the Registrar of the Court to the States, other than the Member States, which are parties to the Agreement on the European Economic Area and also to the EFTA Surveillance Authority referred to in that Agreement which may, within two months of notification, where one of the fields of application of that agreement is concerned, submit statements of case or written observations to the Court.

Where an agreement relating to a specific subject matter, concluded by the Council and one or more non-member States, provides that those States are to be entitled to submit statements of case or written observations where a court or tribunal of a Member State refers to the Court of Justice for a preliminary ruling a question falling within the scope of the agreement, the decision of the national court or tribunal containing that question shall also be notified to the non-member States concerned. Within two months from such notification, those States may lodge at the Court statements of case or written observations.

Article 23a (*)

The Rules of Procedure may provide for an expedited or accelerated procedure and, for references for a preliminary ruling relating to the area of freedom, security and justice, an urgent procedure.

Those procedures may provide, in respect of the submission of statements of case or written observations, for a shorter period than that provided for by Article 23, and, in derogation from the fourth paragraph of Article 20, for the case to be determined without a submission from the Advocate General.

In addition, the urgent procedure may provide for restriction of the parties and other interested persons mentioned in Article 23, authorised to submit statements of case or written observations and, in cases of extreme urgency, for the written stage of the procedure to be omitted.

Article 24

The Court of Justice may require the parties to produce all documents and to supply all information which the Court considers desirable. Formal note shall be taken of any refusal.

The Court may also require the Member States and institutions, bodies, offices and agencies not being parties to the case to supply all information which the Court considers necessary for the proceedings.

Article 25

The Court of Justice may at any time entrust any individual, body, authority, committee or other organisation it chooses with the task of giving an expert opinion.

Article 26

Witnesses may be heard under conditions laid down in the Rules of Procedure.

(*) Article inserted by Decision 2008/79/EC, Euratom (OJ L 24, 29.1.2008, p. 42).

Article 27

With respect to defaulting witnesses the Court of Justice shall have the powers generally granted to courts and tribunals and may impose pecuniary penalties under conditions laid down in the Rules of Procedure.

Article 28

Witnesses and experts may be heard on oath taken in the form laid down in the Rules of Procedure or in the manner laid down by the law of the country of the witness or expert.

Article 29

The Court of Justice may order that a witness or expert be heard by the judicial authority of his place of permanent residence.

The order shall be sent for implementation to the competent judicial authority under conditions laid down in the Rules of Procedure. The documents drawn up in compliance with the letters rogatory shall be returned to the Court under the same conditions.

The Court shall defray the expenses, without prejudice to the right to charge them, where appropriate, to the parties.

Article 30

A Member State shall treat any violation of an oath by a witness or expert in the same manner as if the offence had been committed before one of its courts with jurisdiction in civil proceedings. At the instance of the Court of Justice, the Member State concerned shall prosecute the offender before its competent court.

Article 31

The hearing in court shall be public, unless the Court of Justice, of its own motion or on application by the parties, decides otherwise for serious reasons.

Article 32

During the hearings the Court of Justice may examine the experts, the witnesses and the parties themselves. The latter, however, may address the Court of Justice only through their representatives.

Article 33

Minutes shall be made of each hearing and signed by the President and the Registrar.

Article 34

The case list shall be established by the President.

Article 35

The deliberations of the Court of Justice shall be and shall remain secret.

Article 36

Judgments shall state the reasons on which they are based. They shall contain the names of the Judges who took part in the deliberations.

Article 37

Judgments shall be signed by the President and the Registrar. They shall be read in open court.

Article 38

The Court of Justice shall adjudicate upon costs.

Article 39

The President of the Court of Justice may, by way of summary procedure, which may, in so far as necessary, differ from some of the rules contained in this Statute and which shall be laid down in the Rules of Procedure, adjudicate upon applications to suspend execution, as provided for in Article 278 of the Treaty on the Functioning of the European Union and Article 157 of the EAEC Treaty, or to prescribe interim measures pursuant to Article 279 of the Treaty on the Functioning of the European Union, or to suspend enforcement in accordance with the fourth paragraph of Article 299 of the Treaty on the Functioning of the European Union or the third paragraph of Article 164 of the EAEC Treaty.

Should the President be prevented from attending, his place shall be taken by another Judge under conditions laid down in the Rules of Procedure.

The ruling of the President or of the Judge replacing him shall be provisional and shall in no way prejudice the decision of the Court on the substance of the case.

Article 40

Member States and institutions of the Union may intervene in cases before the Court of Justice.

The same right shall be open to the bodies, offices and agencies of the Union and to any other person which can establish an interest in the result of a case submitted to the Court. Natural or legal persons shall not intervene in cases between Member States, between institutions of the Union or between Member States and institutions of the Union.

Without prejudice to the second paragraph, the States, other than the Member States, which are parties to the Agreement on the European Economic Area, and also the EFTA Surveillance Authority referred to in that Agreement, may intervene in cases before the Court where one of the fields of application of that Agreement is concerned.

An application to intervene shall be limited to supporting the form of order sought by one of the parties.

Article 41

Where the defending party, after having been duly summoned, fails to file written submissions in defence, judgment shall be given against that party by default. An objection may be lodged against the judgment within one month of it being notified. The objection shall not have the effect of staying enforcement of the judgment by default unless the Court of Justice decides otherwise.

Article 42

Member States, institutions, bodies, offices and agencies of the Union and any other natural or legal persons may, in cases and under conditions to be determined by the Rules of Procedure, institute third-party proceedings to contest a judgment rendered without their being heard, where the judgment is prejudicial to their rights.

Article 43

If the meaning or scope of a judgment is in doubt, the Court of Justice shall construe it on application by any party or any institution of the Union establishing an interest therein.

Article 44

An application for revision of a judgment may be made to the Court of Justice only on discovery of a fact which is of such a nature as to be a decisive factor, and which, when the judgment was given, was unknown to the Court and to the party claiming the revision.

The revision shall be opened by a judgment of the Court expressly recording the existence of a new fact, recognising that it is of such a character as to lay the case open to revision and declaring the application admissible on this ground.

No application for revision may be made after the lapse of 10 years from the date of the judgment.

Article 45

Periods of grace based on considerations of distance shall be determined by the Rules of Procedure.

No right shall be prejudiced in consequence of the expiry of a time limit if the party concerned proves the existence of unforeseeable circumstances or of *force majeure*.

Article 46

Proceedings against the Union in matters arising from non-contractual liability shall be barred after a period of five years from the occurrence of the event giving rise thereto. The period of limitation shall be interrupted if proceedings are instituted before the Court of Justice or if prior to such proceedings an application is made by the aggrieved party to the relevant institution of the Union. In the latter event the proceedings must be instituted within the period of two months provided for in Article 263 of the Treaty on the Functioning of the European Union; the provisions of the second paragraph of Article 265 of the Treaty on the Functioning of the European Union shall apply where appropriate.

This Article shall also apply to proceedings against the European Central Bank regarding non-contractual liability.

TITLE IV

GENERAL COURT

Article 47

The first paragraph of Article 9, Articles 14 and 15, the first, second, fourth and fifth paragraphs of Article 17 and Article 18 shall apply to the General Court and its members.

The fourth paragraph of Article 3 and Articles 10, 11 and 14 shall apply to the Registrar of the General Court *mutatis mutandis*.

Article 48

The General Court shall consist of 27 Judges.

Article 49

The Members of the General Court may be called upon to perform the task of an Advocate-General.

It shall be the duty of the Advocate-General, acting with complete impartiality and independence, to make, in open court, reasoned submissions on certain cases brought before the General Court in order to assist the General Court in the performance of its task.

The criteria for selecting such cases, as well as the procedures for designating the Advocates-General, shall be laid down in the Rules of Procedure of the General Court.

A Member called upon to perform the task of Advocate-General in a case may not take part in the judgment of the case.

Article 50

The General Court shall sit in chambers of three or five Judges. The Judges shall elect the Presidents of the chambers from among their number. The Presidents of the chambers of five Judges shall be elected for three years. They may be re-elected once.

The composition of the chambers and the assignment of cases to them shall be governed by the Rules of Procedure. In certain cases governed by the Rules of Procedure, the General Court may sit as a full court or be constituted by a single Judge.

The Rules of Procedure may also provide that the General Court may sit in a Grand Chamber in cases and under the conditions specified therein.

Article 51

By way of derogation from the rule laid down in Article 256(1) of the Treaty on the Functioning of the European Union, jurisdiction shall be reserved to the Court of Justice in the actions referred

to in Articles 263 and 265 of the Treaty on the Functioning of the European Union when they are brought by a Member State against:

(a) an act of or failure to act by the European Parliament or the Council, or by those institutions acting jointly, except for:

– decisions taken by the Council under the third subparagraph of Article 108(2) of the Treaty on the Functioning of the European Union;

– acts of the Council adopted pursuant to a Council regulation concerning measures to protect trade within the meaning of Article 207 of the Treaty on the Functioning of the European Union;

– acts of the Council by which the Council exercises implementing powers in accordance with the second paragraph of Article 291 of the Treaty on the Functioning of the European Union;

(b) against an act of or failure to act by the Commission under the first paragraph of Article 331 of the Treaty on the Functioning of the European Union.

Jurisdiction shall also be reserved to the Court of Justice in the actions referred to in the same Articles when they are brought by an institution of the Union against an act of or failure to act by the European Parliament, the Council, both those institutions acting jointly, or the Commission, or brought by an institution of the Union against an act of or failure to act by the European Central Bank.

Article 52

The President of the Court of Justice and the President of the General Court shall determine, by common accord, the conditions under which officials and other servants attached to the Court of Justice shall render their services to the General Court to enable it to function. Certain officials or other servants shall be responsible to the Registrar of the General Court under the authority of the President of the General Court.

Article 53

The procedure before the General Court shall be governed by Title III.

Such further and more detailed provisions as may be necessary shall be laid down in its Rules of Procedure. The Rules of Procedure may derogate from the fourth paragraph of Article 40 and from Article 41 in order to take account of the specific features of litigation in the field of intellectual property.

Notwithstanding the fourth paragraph of Article 20, the Advocate-General may make his reasoned submissions in writing.

Article 54

Where an application or other procedural document addressed to the General Court is lodged by mistake with the Registrar of the Court of Justice, it shall be transmitted immediately by that Registrar to the Registrar of the General Court; likewise, where an application or other

procedural document addressed to the Court of Justice is lodged by mistake with the Registrar of the General Court, it shall be transmitted immediately by that Registrar to the Registrar of the Court of Justice.

Where the General Court finds that it does not have jurisdiction to hear and determine an action in respect of which the Court of Justice has jurisdiction, it shall refer that action to the Court of Justice; likewise, where the Court of Justice finds that an action falls within the jurisdiction of the General Court, it shall refer that action to the General Court, whereupon that Court may not decline jurisdiction.

Where the Court of Justice and the General Court are seised of cases in which the same relief is sought, the same issue of interpretation is raised or the validity of the same act is called in question, the General Court may, after hearing the parties, stay the proceedings before it until such time as the Court of Justice has delivered judgment or, where the action is one brought pursuant to Article 263 of the Treaty on the Functioning of the European Union, may decline jurisdiction so as to allow the Court of Justice to rule on such actions. In the same circumstances, the Court of Justice may also decide to stay the proceedings before it; in that event, the proceedings before the General Court shall continue.

Where a Member State and an institution of the Union are challenging the same act, the General Court shall decline jurisdiction so that the Court of Justice may rule on those applications.

Article 55

Final decisions of the General Court, decisions disposing of the substantive issues in part only or disposing of a procedural issue concerning a plea of lack of competence or inadmissibility, shall be notified by the Registrar of the General Court to all parties as well as all Member States and the institutions of the Union even if they did not intervene in the case before the General Court.

Article 56

An appeal may be brought before the Court of Justice, within two months of the notification of the decision appealed against, against final decisions of the General Court and decisions of that Court disposing of the substantive issues in part only or disposing of a procedural issue concerning a plea of lack of competence or inadmissibility.

Such an appeal may be brought by any party which has been unsuccessful, in whole or in part, in its submissions. However, interveners other than the Member States and the institutions of the Union may bring such an appeal only where the decision of the General Court directly affects them.

With the exception of cases relating to disputes between the Union and its servants, an appeal may also be brought by Member States and institutions of the Union which did not intervene in the proceedings before the General Court. Such Member States and institutions shall be in the same position as Member States or institutions which intervened at first instance.

Article 57

Any person whose application to intervene has been dismissed by the General Court may appeal to the Court of Justice within two weeks from the notification of the decision dismissing the application.

The parties to the proceedings may appeal to the Court of Justice against any decision of the General Court made pursuant to Article 278 or Article 279 or the fourth paragraph of Article 299 of the Treaty on the Functioning of the European Union or Article 157 or the third paragraph of Article 164 of the EAEC Treaty within two months from their notification.

The appeal referred to in the first two paragraphs of this Article shall be heard and determined under the procedure referred to in Article 39.

Article 58

An appeal to the Court of Justice shall be limited to points of law. It shall lie on the grounds of lack of competence of the General Court, a breach of procedure before it which adversely affects the interests of the appellant as well as the infringement of Union law by the General Court.

No appeal shall lie regarding only the amount of the costs or the party ordered to pay them.

Article 59

Where an appeal is brought against a decision of the General Court, the procedure before the Court of Justice shall consist of a written part and an oral part. In accordance with conditions laid down in the Rules of Procedure, the Court of Justice, having heard the Advocate-General and the parties, may dispense with the oral procedure.

Article 60

Without prejudice to Articles 278 and 279 of the Treaty on the Functioning of the European Union or Article 157 of the EAEC Treaty, an appeal shall not have suspensory effect.

By way of derogation from Article 280 of the Treaty on the Functioning of the European Union, decisions of the General Court declaring a regulation to be void shall take effect only as from the date of expiry of the period referred to in the first paragraph of Article 56 of this Statute or, if an appeal shall have been brought within that period, as from the date of dismissal of the appeal, without prejudice, however, to the right of a party to apply to the Court of Justice, pursuant to Articles 278 and 279 of the Treaty on the Functioning of the European Union or Article 157 of the EAEC Treaty, for the suspension of the effects of the regulation which has been declared void or for the prescription of any other interim measure.

Article 61

If the appeal is well founded, the Court of Justice shall quash the decision of the General Court. It may itself give final judgment in the matter, where the state of the proceedings so permits, or refer the case back to the General Court for judgment.

Where a case is referred back to the General Court, that Court shall be bound by the decision of the Court of Justice on points of law.

When an appeal brought by a Member State or an institution of the Union, which did not intervene in the proceedings before the General Court, is well founded, the Court of Justice may,

if it considers this necessary, state which of the effects of the decision of the General Court which has been quashed shall be considered as definitive in respect of the parties to the litigation.

Article 62

In the cases provided for in Article 256(2) and (3) of the Treaty on the Functioning of the European Union, where the First Advocate-General considers that there is a serious risk of the unity or consistency of Union law being affected, he may propose that the Court of Justice review the decision of the General Court.

The proposal must be made within one month of delivery of the decision by the General Court. Within one month of receiving the proposal made by the First Advocate-General, the Court of Justice shall decide whether or not the decision should be reviewed.

Article 62a

The Court of Justice shall give a ruling on the questions which are subject to review by means of an urgent procedure on the basis of the file forwarded to it by the General Court.

Those referred to in Article 23 of this Statute and, in the cases provided for in Article 256(2) of the EC Treaty, the parties to the proceedings before the General Court shall be entitled to lodge statements or written observations with the Court of Justice relating to questions which are subject to review within a period prescribed for that purpose.

The Court of Justice may decide to open the oral procedure before giving a ruling.

Article 62b

In the cases provided for in Article 256(2) of the Treaty on the Functioning of the European Union, without prejudice to Articles 278 and 279 of the Treaty on the Functioning of the European Union, proposals for review and decisions to open the review procedure shall not have suspensory effect. If the Court of Justice finds that the decision of the General Court affects the unity or consistency of Union law, it shall refer the case back to the General Court which shall be bound by the points of law decided by the Court of Justice; the Court of Justice may state which of the effects of the decision of the General Court are to be considered as definitive in respect of the parties to the litigation. If, however, having regard to the result of the review, the outcome of the proceedings flows from the findings of fact on which the decision of the General Court was based, the Court of Justice shall give final judgment.

In the cases provided for in Article 256(3) of the Treaty on the Functioning of the European Union, in the absence of proposals for review or decisions to open the review procedure, the answer(s) given by the General Court to the questions submitted to it shall take effect upon expiry of the periods prescribed for that purpose in the second paragraph of Article 62. Should a review procedure be opened, the answer(s) subject to review shall take effect following that procedure, unless the Court of Justice decides otherwise. If the Court of Justice finds that the decision of the General Court affects the unity or consistency of Union law, the answer given by the Court of Justice to the questions subject to review shall be substituted for that given by the General Court.

TITLE IV*a*

JUDICIAL PANELS

Article 62c

The provisions relating to the jurisdiction, composition, organisation and procedure of the judicial panels established under Article 257 of the Treaty on the Functioning of the European Union are set out in an Annex to this Statute.

TITLE V

FINAL PROVISIONS

Article 63

The Rules of Procedure of the Court of Justice and of the General Court shall contain any provisions necessary for applying and, where required, supplementing this Statute.

Article 64

The rules governing the language arrangements applicable at the Court of Justice of the European Union shall be laid down by a regulation of the Council acting unanimously. This regulation shall be adopted either at the request of the Court of Justice and after consultation of the Commission and the European Parliament, or on a proposal from the Commission and after consultation of the Court of Justice and of the European Parliament.

Until those rules have been adopted, the provisions of the Rules of Procedure of the Court of Justice and of the Rules of Procedure of the General Court governing language arrangements shall continue to apply. By way of derogation from Articles 253 and 254 of the Treaty on the Functioning of the European Union, those provisions may only be amended or repealed with the unanimous consent of the Council.

ANNEX I

THE EUROPEAN UNION CIVIL SERVICE TRIBUNAL

Article 1

The European Union Civil Service Tribunal (hereafter ‘the Civil Service Tribunal’) shall exercise at first instance jurisdiction in disputes between the Union and its servants referred to in Article 270 of the Treaty on the Functioning of the European Union, including disputes between all bodies or agencies and their servants in respect of which jurisdiction is conferred on the Court of Justice of the European Union.

Article 2

The Civil Service Tribunal shall consist of seven judges. Should the Court of Justice so request, the Council, acting by a qualified majority, may increase the number of judges.

The judges shall be appointed for a period of six years. Retiring judges may be reappointed.

Any vacancy shall be filled by the appointment of a new judge for a period of six years.

Article 3

1. The judges shall be appointed by the Council, acting in accordance with the fourth paragraph of Article 257 of the Treaty on the Functioning of the European Union, after consulting the committee provided for by this Article. When appointing judges, the Council shall ensure a balanced composition of the Civil Service Tribunal on as broad a geographical basis as possible from among nationals of the Member States and with respect to the national legal systems represented.

2. Any person who is a Union citizen and fulfils the conditions laid down in the fourth paragraph of Article 257 of the Treaty on the Functioning of the European Union may submit an application. The Council, acting on a recommendation from the Court of Justice, shall determine the conditions and the arrangements governing the submission and processing of such applications.

3. A committee shall be set up comprising seven persons chosen from among former members of the Court of Justice and the General Court and lawyers of recognised competence. The committee's membership and operating rules shall be determined by the Council, acting on a recommendation by the President of the Court of Justice.

4. The committee shall give an opinion on candidates' suitability to perform the duties of judge at the Civil Service Tribunal. The committee shall append to its opinion a list of candidates having the most suitable high-level experience. Such list shall contain the names of at least twice as many candidates as there are judges to be appointed by the Council.

Article 4

1. The judges shall elect the President of the Civil Service Tribunal from among their number for a term of three years. He may be re-elected.

2. The Civil Service Tribunal shall sit in chambers of three judges. It may, in certain cases determined by its rules of procedure, sit in full court or in a chamber of five judges or of a single judge.

3. The President of the Civil Service Tribunal shall preside over the full court and the chamber of five judges. The Presidents of the chambers of three judges shall be designated as provided in paragraph 1. If the President of the Civil Service Tribunal is assigned to a chamber of three judges, he shall preside over that chamber.

4. The jurisdiction of and quorum for the full court as well as the composition of the chambers and the assignment of cases to them shall be governed by the rules of procedure.

Article 5

Articles 2 to 6, 14, 15, the first, second and fifth paragraphs of Article 17, and Article 18 of the Statute of the Court of Justice of the European Union shall apply to the Civil Service Tribunal and its members.

The oath referred to in Article 2 of the Statute shall be taken before the Court of Justice, and the decisions referred to in Articles 3, 4 and 6 thereof shall be adopted by the Court of Justice after consulting the Civil Service Tribunal.

Article 6

1. The Civil Service Tribunal shall be supported by the departments of the Court of Justice and of the General Court. The President of the Court of Justice or, in appropriate cases, the President of the General Court, shall determine by common accord with the President of the Civil Service Tribunal the conditions under which officials and other servants attached to the Court of Justice or the General Court shall render their services to the Civil Service Tribunal to enable it to function. Certain officials or other servants shall be responsible to the Registrar of the Civil Service Tribunal under the authority of the President of that Tribunal.

2. The Civil Service Tribunal shall appoint its Registrar and lay down the rules governing his service. The fourth paragraph of Article 3 and Articles 10, 11 and 14 of the Statute of the Court of Justice of the European Union shall apply to the Registrar of the Tribunal.

Article 7

1. The procedure before the Civil Service Tribunal shall be governed by Title III of the Statute of the Court of Justice of the European Union, with the exception of Articles 22 and 23. Such further and more detailed provisions as may be necessary shall be laid down in the rules of procedure.

2. The provisions concerning the General Court's language arrangements shall apply to the Civil Service Tribunal.

3. The written stage of the procedure shall comprise the presentation of the application and of the statement of defence, unless the Civil Service Tribunal decides that a second exchange of written pleadings is necessary. Where there is such second exchange, the Civil Service Tribunal may, with the agreement of the parties, decide to proceed to judgment without an oral procedure.

4. At all stages of the procedure, including the time when the application is filed, the Civil Service Tribunal may examine the possibilities of an amicable settlement of the dispute and may try to facilitate such settlement.

5. The Civil Service Tribunal shall rule on the costs of a case. Subject to the specific provisions of the Rules of Procedure, the unsuccessful party shall be ordered to pay the costs should the court so decide.

Article 8

1. Where an application or other procedural document addressed to the Civil Service Tribunal is lodged by mistake with the Registrar of the Court of Justice or General Court, it shall be transmitted immediately by that Registrar to the Registrar of the Civil Service Tribunal. Likewise, where an application or other procedural document addressed to the Court of Justice or to the General Court is lodged by mistake with the Registrar of the Civil Service Tribunal, it shall be transmitted immediately by that Registrar to the Registrar of the Court of Justice or General Court.

2. Where the Civil Service Tribunal finds that it does not have jurisdiction to hear and determine an action in respect of which the Court of Justice or the General Court has jurisdiction, it shall refer that action to the Court of Justice or to the General Court. Likewise, where the Court of Justice or the General Court finds that an action falls within the jurisdiction of the Civil Service Tribunal, the Court seised shall refer that action to the Civil Service Tribunal, whereupon that Tribunal may not decline jurisdiction.

3. Where the Civil Service Tribunal and the General Court are seised of cases in which the same issue of interpretation is raised or the validity of the same act is called in question, the Civil Service Tribunal, after hearing the parties, may stay the proceedings until the judgment of the General Court has been delivered.

Where the Civil Service Tribunal and the General Court are seised of cases in which the same relief is sought, the Civil Service Tribunal shall decline jurisdiction so that the General Court may act on those cases.

Article 9

An appeal may be brought before the General Court, within two months of notification of the decision appealed against, against final decisions of the Civil Service Tribunal and decisions of that Tribunal disposing of the substantive issues in part only or disposing of a procedural issue concerning a plea of lack of jurisdiction or inadmissibility.

Such an appeal may be brought by any party which has been unsuccessful, in whole or in part, in its submissions. However, interveners other than the Member States and the institutions of the Union may bring such an appeal only where the decision of the Civil Service Tribunal directly affects them.

Article 10

1. Any person whose application to intervene has been dismissed by the Civil Service Tribunal may appeal to the General Court within two weeks of notification of the decision dismissing the application.

2. The parties to the proceedings may appeal to the General Court against any decision of the Civil Service Tribunal made pursuant to Article 278 or Article 279 or the fourth paragraph of Article 299 of the Treaty on the Functioning of the European Union or Article 157 or the third paragraph of Article 164 of the EAEC Treaty within two months of its notification.

3. The President of the General Court may, by way of summary procedure, which may, in so far as necessary, differ from some of the rules contained in this Annex and which shall be laid down in the rules of procedure of the General Court, adjudicate upon appeals brought in accordance with paragraphs 1 and 2.

Article 11

1. An appeal to the General Court shall be limited to points of law. It shall lie on the grounds of lack of jurisdiction of the Civil Service Tribunal, a breach of procedure before it which adversely affects the interests of the appellant, as well as the infringement of Union law by the Tribunal.

2. No appeal shall lie regarding only the amount of the costs or the party ordered to pay them.

Article 12

1. Without prejudice to Articles 278 and 279 of the Treaty on the Functioning of the European Union or Article 157 of the EAEC Treaty, an appeal before the General Court shall not have suspensory effect.

2. Where an appeal is brought against a decision of the Civil Service Tribunal, the procedure before the General Court shall consist of a written part and an oral part. In accordance with conditions laid down in the rules of procedure, the General Court, having heard the parties, may dispense with the oral procedure.

Article 13

1. If the appeal is well founded, the General Court shall quash the decision of the Civil Service Tribunal and itself give judgment in the matter. It shall refer the case back to the Civil Service Tribunal for judgment where the state of the proceedings does not permit a decision by the Court.

2. Where a case is referred back to the Civil Service Tribunal, the Tribunal shall be bound by the decision of the General Court on points of law.

PROTOCOL (No 2)

ON THE APPLICATION OF THE PRINCIPLES OF SUBSIDIARITY AND PROPORTIONALITY

Article 8

The Court of Justice of the European Union shall have jurisdiction in actions on grounds of infringement of the principle of subsidiarity by a legislative act, brought in accordance with the rules laid down in Article 263 of the Treaty on the Functioning of the European Union by Member States, or notified by them in accordance with their legal order on behalf of their national Parliament or a chamber thereof.

In accordance with the rules laid down in the said Article, the Committee of the Regions may also bring such actions against legislative acts for the adoption of which the Treaty on the Functioning of the European Union provides that it be consulted.

PROTOCOL (No 7)
ON THE PRIVILEGES AND IMMUNITIES OF THE EUROPEAN UNION

Article 1

The premises and buildings of the Union shall be inviolable. They shall be exempt from search, requisition, confiscation or expropriation. The property and assets of the Union shall not be the subject of any administrative or legal measure of constraint without the authorisation of the Court of Justice.

PROTOCOL (No 36)

ON TRANSITIONAL PROVISIONS

TITLE VII

TRANSITIONAL PROVISIONS CONCERNING ACTS ADOPTED ON THE BASIS OF TITLES V AND VI OF THE TREATY ON EUROPEAN UNION PRIOR TO THE ENTRY INTO FORCE OF THE TREATY OF LISBON

Article 10

1. As a transitional measure, and with respect to acts of the Union in the field of police cooperation and judicial cooperation in criminal matters which have been adopted before the entry into force of the Treaty of Lisbon, the powers of the institutions shall be the following at the date of entry into force of that Treaty: the powers of the Commission under Article 258 of the Treaty on the Functioning of the European Union shall not be applicable and the powers of the Court of Justice of the European Union under Title VI of the Treaty on European Union, in the version in force before the entry into force of the Treaty of Lisbon, shall remain the same, including where they have been accepted under Article 35(2) of the said Treaty on European Union.

2. The amendment of an act referred to in paragraph 1 shall entail the applicability of the powers of the institutions referred to in that paragraph as set out in the Treaties with respect to the amended act for those Member States to which that amended act shall apply.

3. In any case, the transitional measure mentioned in paragraph 1 shall cease to have effect five years after the date of entry into force of the Treaty of Lisbon.

4. At the latest six months before the expiry of the transitional period referred to in paragraph 3, the United Kingdom may notify to the Council that it does not accept, with respect to the acts referred to in paragraph 1, the powers of the institutions referred to in paragraph 1 as set out in the Treaties. In case the United Kingdom has made that notification, all acts referred to in paragraph 1 shall cease to apply to it as from the date of expiry of the transitional period referred to in paragraph 3. This subparagraph shall not apply with respect to the amended acts which are applicable to the United Kingdom as referred to in paragraph 2.

The Council, acting by a qualified majority on a proposal from the Commission, shall determine the necessary consequential and transitional arrangements. The United Kingdom shall not participate in the adoption of this decision. A qualified majority of the Council shall be defined in accordance with Article 238(3)(a) of the Treaty on the Functioning of the European Union.

The Council, acting by a qualified majority on a proposal from the Commission, may also adopt a decision determining that the United Kingdom shall bear the direct financial consequences, if any, necessarily and unavoidably incurred as a result of the cessation of its participation in those acts.

[*Article 35* (text prior to the entry into force of the Treaty of Lisbon): 1. The Court of Justice of the European Communities shall have jurisdiction, subject to the conditions laid down in this Article, to give preliminary rulings on the validity and interpretation of framework decisions and

decisions, on the interpretation of conventions established under this Title and on the validity and interpretation of the measures implementing them.

2. By a declaration made at the time of signature of the Treaty of Amsterdam or at any time thereafter, any Member State shall be able to accept the jurisdiction of the Court of Justice to give preliminary rulings as specified in paragraph 1.

3. A Member State making a declaration pursuant to paragraph 2 shall specify that either:

(a) any court or tribunal of that State against whose decisions there is no judicial remedy under national law may request the Court of Justice to give a preliminary ruling on a question raised in a case pending before it and concerning the validity or interpretation of an act referred to in paragraph 1 if that court or tribunal considers that a decision on the question is necessary to enable it to give judgment, or

(b) any court or tribunal of that State may request the Court of Justice to give a preliminary ruling on a question raised in a case pending before it and concerning the validity or interpretation of an act referred to in paragraph 1 if that court or tribunal considers that a decision on the question is necessary to enable it to give judgment.

4. Any Member State, whether or not it has made a declaration pursuant to paragraph 2, shall be entitled to submit statements of case or written observations to the Court in cases which arise under paragraph 1.

5. The Court of Justice shall have no jurisdiction to review the validity or proportionality of operations carried out by the police or other law enforcement services of a Member State or the exercise of the responsibilities incumbent upon Member States with regard to the maintenance of law and order and the safeguarding of internal security.

6. The Court of Justice shall have jurisdiction to review the legality of framework decisions and decisions in actions brought by a Member State or the Commission on grounds of lack of competence, infringement of an essential procedural requirement, infringement of this Treaty or of any rule of law relating to its application, or misuse of powers. The proceedings provided for in this paragraph shall be instituted within two months of the publication of the measure.

7. The Court of Justice shall have jurisdiction to rule on any dispute between Member States regarding the interpretation or the application of acts adopted under Article 34(2) whenever such dispute cannot be settled by the Council within six months of its being referred to the Council by one of its members. The Court shall also have jurisdiction to rule on any dispute between Member States and the Commission regarding the interpretation or the application of conventions established under Article 34(2)(d).]

Jurisdiction of the Court of Justice to give preliminary rulings on police and judicial cooperation in criminal matters

Member State	Declaration under Article 35(2) EU	Option chosen (point (a) or point (b) of Article 35(3) EU)	Reservation pursuant to Declaration No 10 annexed to the Amsterdam Final Act (Declaration on Article 35 EU (formerly Article K.7))	Information published in OJ [1]	Provisions of national law adopted further to the reservation pursuant to Declaration No 10
Germany	yes	point (b)	yes	1999 L 114, p. 56 1999 C 120, p. 24	Gesetz betreffend die Anrufung des Gerichtshofs der Europäischen Gemeinschaften im Wege des Vorabentscheidungsverfahrens auf dem Gebiet der polizeilichen Zusammenarbeit und der justitiellen Zusammenarbeit in Strafsachen nach Art. 35 des EU-Vertrages (EuGH-Gesetz) vom 6. 8. 1998 BGBl. 1998 I, p.2035
Austria	yes	point (b)	yes	1999 L 114, p. 56 1999 C 120, p. 24	Bundesgesetz über die Einholung von Vorabentscheidungen des Gerichtshofs der Europäischen Gemeinschaften auf dem Gebiet der polizeilichen Zusammenarbeit und der justitiellen Zusammenarbeit in Strafsachen BGBl. I N°89/1999
Belgium	yes	point (b)	yes	1999 L 114, p. 56 1999 C 120, p. 24	*
Bulgaria	*				
Cyprus	*				
Denmark	no	–	–	–	–
Spain	yes	point (a)	yes	1999 L 114, p. 56 1999 C 120, p. 24	Ley Orgánica 9/1998, de 16 de diciembre BOE 17 de diciembre 1998, núm. 301/1998 [pág. 42266]
Estonia	*				
Finland	yes	point (b)	no	1999 L 114, p. 56 1999 C 120, p. 24	–
France	yes	point (b)	yes	2005 L 327, p. 19	Décret n° 2000-668 du 10 juillet

*. No official information available

[1] A summary report on the declarations concerning acceptance was published, in identical terms, in OJ 2008 L 70, p. 23, and OJ 2008 C 69, p. 1.

				2005 C 318, p. 1	2000 Journal Officiel de la République française du 19.07.00, p. 11073
Greece	yes	point (b)	no	no 1999 L 114, p. 5 1999 C 120, p. 24	–
Hungary	yes	point (b) [2]	no	2005 L 327, p. 19 2005 C 318, p. 1 2008 L 70, p. 23 2008 C 69, p. 1	–
Ireland	no	–	–	–	–
Italy	yes	point (b)	yes	1999 L 114, p. 56 1999 C 120, p. 24	**
Latvia	yes	point (b)	no	2008 L 70, p. 23 2008 C 69, p. 1	*
Lithuania	yes	point (b)	no	2008 L 70, p. 23 2008 C 69, p. 1	–
Luxembourg	yes	point (b)	yes	1999 L 114, p. 56 1999 C 120, p. 24	*
Malta	*				
Netherlands	yes	point (b)	yes	1999 L 114, p. 56 1999 C 120, p. 24	*
Poland	*				
Portugal	yes	point (b)	no	1999 L 114, p. 56 1999 C 120, p. 24	–
Czech Republic	yes	point (b)	yes	2003 L 236, p. 980	§ 109 odst. 1 písm. d) OSŘ ve znění zákona č. 555/2004 Sb. Parlamentu České republiky, kterým se mění zákon č. 99/1963 Sb., občanský soudní řád, ve znění pozdějších předpisů, zákon č. 150/2002 Sb., soudní řád správní, ve znění pozdějších předpisů, zákon č. 549/1991 Sb., o soudních poplatcích, ve znění pozdějších předpisů, a zákon č. 85/1996 Sb., o advokacii, ve znění pozdějších předpisů
Romania	*				
United Kingdom	no	–	–	–	–

[2] According to the information published in OJ 2008 L 70, p. 23, and OJ 2008 C 69, p. 1, the Republic of Hungary has withdrawn its previous declaration (see OJ 2005 L 327, p. 19, and 2005 C 318, p. 1) that it accepted the jurisdiction of the Court of Justice of the European Communities in accordance with the arrangements laid down in Article 35(2) and (3)(a) of the Treaty on European Union and has declared that it accepts the jurisdiction of the Court of Justice of the European Communities in accordance with the arrangements laid down in Article 35(2) and (3)(b) of the Treaty on European Union. This is consistent with Decision (Kormányhatározat) 2088/2003 (V.15) of the Hungarian Government, according to which the Republic of Hungary accepts the jurisdiction of the Court of Justice in accordance with the arrangements laid down in Article 35(3)(b) EU.

Slovakia	*				
Slovenia	yes	point (b)	yes	2008 L 70, p. 23 2008 C 69, p. 1	*
Sweden	yes	point (b)	no	1999 L 114, p. 56 1999 C 120, p. 24	

II

(Non-legislative acts)

RULES OF PROCEDURE

RULES OF PROCEDURE OF THE COURT OF JUSTICE

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RULES OF PROCEDURE OF THE COURT OF JUSTICE

THE COURT OF JUSTICE

Having regard to the Treaty on European Union, and in particular Article 19 thereof,

Having regard to the Treaty on the Functioning of the European Union, and in particular the sixth paragraph of Article 253 thereof,

Having regard to the Treaty establishing the European Atomic Energy Community, and in particular Article 106a(1) thereof,

Having regard to the Protocol on the Statute of the Court of Justice of the European Union, and in particular Article 63 and the second paragraph of Article 64 thereof,

Whereas:

(1) Despite having been amended on several occasions over the years, the Rules of Procedure of the Court of Justice have remained fundamentally unchanged in structure since their original adoption on 4 March 1953. The Rules of Procedure of 19 June 1991, which are currently in force, still reflect the initial preponderance of direct actions, whereas in fact the majority of such actions now fall within the jurisdiction of the General Court, and references for a preliminary ruling from the courts and tribunals of the Member States represent, quantitatively, the primary category of cases brought before the Court. That fact should be taken into account and the structure and content of the Rules of Procedure of the Court adapted, in consequence, to changes in its caseload.

(2) While references for a preliminary ruling should be given their proper place in the Rules of Procedure, it is also appropriate to draw a clearer distinction between the rules that apply to all types of action and those that are specific to each type, to be contained in separate titles. In the interests of clarification, procedural provisions common to all cases brought before the Court should, therefore, all be contained in an initial title.

(3) In the light of experience gained in the course of implementing the various procedures, it is also necessary to supplement or to clarify, for the benefit of litigants as well as of national courts and tribunals, the rules that apply to each procedure. The rules in question concern, in particular, the concepts of party to the main proceedings, intervener and party to the proceedings before the General Court, or, in preliminary rulings, the rules governing the bringing of matters before the Court and the content of the order for reference. With regard to appeals against decisions of the General Court, a clearer distinction must also be drawn between appeals and cross-appeals in consequence of the service of an appeal on the cross-appellant.

(4) Conversely, the excessive complexity of certain procedures, such as the review procedure, has come to light on their implementation. Accordingly, they should be simplified by providing, inter alia, for a Chamber of five Judges to be designated for a period of one year to be responsible for ruling both on the First Advocate General's proposal to review and on the questions to be reviewed.

(5) Similarly, the procedural arrangements for dealing with requests for Opinions should be eased by aligning them with those that apply to other cases and by providing, in consequence, for a single Advocate General to be involved in dealing with the request for an Opinion. In the interests of making the Rules easier to understand, all the particular procedures currently to be found in a number of separate titles and chapters of the Rules of Procedure should also be brought together in a single title.

(6) In order to maintain the Court's capacity, in the face of an ever-increasing caseload, to dispose within a reasonable period of time of the cases brought before it, it is also necessary to continue the efforts made to reduce the duration of proceedings before the Court, in particular by extending the opportunities for the Court to rule by reasoned order, simplifying the rules relating to the intervention of the States and institutions referred to in the first and third paragraphs of Article 40 of the Statute and providing for the Court to be able to rule without a hearing if it considers that it has sufficient information on the basis of all the written observations lodged in a case.

(7) In the interests of making the Rules applied by the Court easier to understand, lastly, certain rules which are outdated or not applied should be deleted, every paragraph of the present Rules numbered, each article given a specific heading summarising its content and the terminology harmonised.

With the Council's approval given on 24 September 2012.

HAS ADOPTED THESE RULES OF PROCEDURE:

INTRODUCTORY PROVISIONS

Article 1

Definitions

1. In these Rules:

(a) provisions of the Treaty on European Union are referred to by the number of the article concerned followed by 'TEU',

(b) provisions of the Treaty on the Functioning of the European Union are referred to by the number of the article concerned followed by 'TFEU',

(c) provisions of the Treaty establishing the European Atomic Energy Community are referred to by the number of the article concerned followed by 'TEAEC',

(d) 'Statute' means the Protocol on the Statute of the Court of Justice of the European Union,

(e) 'EEA Agreement' means the Agreement on the European Economic Area, [1]

(f) 'Council Regulation No 1' means Council Regulation No 1 of 15 April 1958 determining the languages to be used by the European Economic Community. [2]

2. For the purposes of these Rules:

(a) 'institutions' means the institutions of the European Union referred to in Article 13(1) TEU and bodies, offices and agencies established by the Treaties, or by an act adopted in implementation thereof, which may be parties before the Court,

(b) 'EFTA Surveillance Authority' means the surveillance authority referred to in the EEA Agreement,

(c) 'interested persons referred to in Article 23 of the Statute' means all the parties, States, institutions, bodies, offices and agencies authorised, pursuant to that Article, to submit statements of case or observations in the context of a reference for a preliminary ruling.

Article 2

Purport of these Rules

These Rules implement and supplement, so far as necessary, the relevant provisions of the EU, FEU and EAEC Treaties, and the Statute.

TITLE I

ORGANISATION OF THE COURT

Chapter 1

JUDGES AND ADVOCATES GENERAL

Article 3

Commencement of the term of office of Judges and Advocates General

The term of office of a Judge or Advocate General shall begin on the date fixed for that purpose in the instrument of appointment. In the absence of any provisions in that instrument regarding the date of commencement of the term of office, that term shall begin on the date of publication of the instrument in the *Official Journal of the European Union*.

Article 4

Taking of the oath

Before taking up his duties, a Judge or Advocate General shall, at the first public sitting of the Court which he attends after his appointment, take the following oath provided for in Article 2 of the Statute:

'I swear that I will perform my duties impartially and conscientiously; I swear that I will preserve the secrecy of the deliberations of the Court.'

Article 5

Solemn undertaking

Immediately after taking the oath, a Judge or Advocate General shall sign a declaration by which he gives the solemn undertaking provided for in the third paragraph of Article 4 of the Statute.

Article 6

Depriving a Judge or Advocate General of his office

1. Where the Court is called upon, pursuant to Article 6 of the Statute, to decide whether a Judge or Advocate General no longer fulfils the requisite conditions or no longer meets the obligations arising from his office, the President shall invite the Judge or Advocate General concerned to make representations.

2. The Court shall give a decision in the absence of the Registrar.

Article 7

Order of seniority

1. The seniority of Judges and Advocates General shall be calculated without distinction according to the date on which they took up their duties.

2. Where there is equal seniority on that basis, the order of seniority shall be determined by age.

3. Judges and Advocates General whose terms of office are renewed shall retain their former seniority.

Chapter 2

PRESIDENCY OF THE COURT, CONSTITUTION OF THE CHAMBERS AND DESIGNATION OF THE FIRST ADVOCATE GENERAL

Article 8

Election of the President and of the Vice-President of the Court

1. The Judges shall, immediately after the partial replacement provided for in the second paragraph of Article 253 TFEU, elect one of their number as President of the Court for a term of three years.

2. If the office of the President falls vacant before the normal date of expiry of the term thereof, the Court shall elect a successor for the remainder of the term.

3. The elections provided for in this Article shall be by secret ballot. The Judge obtaining the votes of more than half the Judges of the Court shall be elected. If no Judge obtains that majority, further ballots shall be held until that majority is attained.

[1] OJ L 1, 3.1.1994, p. 27.
[2] OJ, English Special Edition 1952-1958 (I), p. 59.

4. The Judges shall then elect one of their number as Vice-President of the Court for a term of three years, in accordance with the procedures laid down in the preceding paragraph. Paragraph 2 shall apply if the office of the Vice-President of the Court falls vacant before the normal date of expiry of the term thereof.

5. The names of the President and Vice-President elected in accordance with this Article shall be published in the *Official Journal of the European Union*.

Article 9

Responsibilities of the President of the Court

1. The President shall represent the Court.

2. The President shall direct the judicial business of the Court. He shall preside at general meetings of the Members of the Court and at hearings before and deliberations of the full Court and the Grand Chamber.

3. The President shall ensure the proper functioning of the services of the Court.

Article 10

Responsibilities of the Vice-President of the Court

1. The Vice-President shall assist the President of the Court in the performance of his duties and shall take the President's place when the latter is prevented from acting.

2. He shall take the President's place, at his request, in performing the duties referred to in Article 9(1) and (3) of these Rules.

3. The Court shall, by decision, specify the conditions under which the Vice-President shall take the place of the President of the Court in the performance of his judicial duties. That decision shall be published in the *Official Journal of the European Union*.

Article 11

Constitution of Chambers

1. The Court shall set up Chambers of five and three Judges in accordance with Article 16 of the Statute and shall decide which Judges shall be attached to them.

2. The Court shall designate the Chambers of five Judges which, for a period of one year, shall be responsible for cases of the kind referred to in Article 107 and Articles 193 and 194.

3. In respect of cases assigned to a formation of the Court in accordance with Article 60, the word 'Court' in these Rules shall mean that formation.

4. In respect of cases assigned to a Chamber of five or three Judges, the powers of the President of the Court shall be exercised by the President of the Chamber.

5. The composition of the Chambers and the designation of the Chambers responsible for cases of the kind referred to in Article 107 and Articles 193 and 194 shall be published in the *Official Journal of the European Union*.

Article 12

Election of Presidents of Chambers

1. The Judges shall, immediately after the election of the President and Vice-President of the Court, elect the Presidents of the Chambers of five Judges for a term of three years.

2. The Judges shall then elect the Presidents of the Chambers of three Judges for a term of one year.

3. The provisions of Article 8(2) and (3) shall apply.

4. The names of the Presidents of Chambers elected in accordance with this Article shall be published in the *Official Journal of the European Union*.

Article 13

Where the President and Vice-President of the Court are prevented from acting

When the President and the Vice-President of the Court are prevented from acting, the functions of President shall be exercised by one of the Presidents of the Chambers of five Judges or, failing that, by one of the Presidents of the Chambers of three Judges or, failing that, by one of the other Judges, according to the order of seniority laid down in Article 7.

Article 14

Designation of the First Advocate General

1. The Court shall, after hearing the Advocates General, designate a First Advocate General for a period of one year.

2. If the office of the First Advocate General falls vacant before the normal date of expiry of the term thereof, the Court shall designate a successor for the remainder of the term.

3. The name of the First Advocate General designated in accordance with this Article shall be published in the *Official Journal of the European Union*.

Chapter 3

ASSIGNMENT OF CASES TO JUDGE-RAPPORTEURS AND ADVOCATES GENERAL

Article 15

Designation of the Judge-Rapporteur

1. As soon as possible after the document initiating proceedings has been lodged, the President of the Court shall designate a Judge to act as Rapporteur in the case.

2. For cases of the kind referred to in Article 107 and Articles 193 and 194, the Judge-Rapporteur shall be selected from among the Judges of the Chamber designated in accordance with Article 11(2), on a proposal from the President of that Chamber. If, pursuant to Article 109, the Chamber decides that the reference is not to be dealt with under the urgent procedure, the President of the Court may reassign the case to a Judge-Rapporteur attached to another Chamber.

3. The President of the Court shall take the necessary steps if a Judge-Rapporteur is prevented from acting.

Article 16

Designation of the Advocate General

1. The First Advocate General shall assign each case to an Advocate General.

2. The First Advocate General shall take the necessary steps if an Advocate General is prevented from acting.

Chapter 4

ASSISTANT RAPPORTEURS

Article 17

Assistant Rapporteurs

1. Where the Court is of the opinion that the consideration of and preparatory inquiries in cases before it so require, it shall, pursuant to Article 13 of the Statute, propose the appointment of Assistant Rapporteurs.

2. Assistant Rapporteurs shall in particular:

(a) assist the President of the Court in interim proceedings and

(b) assist the Judge-Rapporteurs in their work.

3. In the performance of their duties the Assistant Rapporteurs shall be responsible to the President of the Court, the President of a Chamber or a Judge-Rapporteur, as the case may be.

4. Before taking up his duties, an Assistant Rapporteur shall take before the Court the oath set out in Article 4 of these Rules.

Chapter 5

REGISTRY

Article 18

Appointment of the Registrar

1. The Court shall appoint the Registrar.

2. When the post of Registrar is vacant, an advertisement shall be published in the *Official Journal of the European Union*. Interested persons shall be invited to submit their applications within a time-limit of not less than three weeks, accompanied by full details of their nationality, university degrees, knowledge of languages, present and past occupations, and experience, if any, in judicial and international fields.

3. The vote, in which the Judges and the Advocates General shall take part, shall take place in accordance with the procedure laid down in Article 8(3) of these Rules.

4. The Registrar shall be appointed for a term of six years. He may be reappointed. The Court may decide to renew the term of office of the incumbent Registrar without availing itself of the procedure laid down in paragraph 2 of this Article.

5. The Registrar shall take the oath set out in Article 4 and sign the declaration provided for in Article 5.

6. The Registrar may be deprived of his office only if he no longer fulfils the requisite conditions or no longer meets the obligations arising from his office. The Court shall take its decision after giving the Registrar an opportunity to make representations.

7. If the office of Registrar falls vacant before the normal date of expiry of the term thereof, the Court shall appoint a new Registrar for a term of six years.

8. The name of the Registrar elected in accordance with this Article shall be published in the *Official Journal of the European Union*.

Article 19

Deputy Registrar

The Court may, in accordance with the procedure laid down in respect of the Registrar, appoint a Deputy Registrar to assist the Registrar and to take his place if he is prevented from acting.

Article 20

Responsibilities of the Registrar

1. The Registrar shall be responsible, under the authority of the President of the Court, for the acceptance, transmission and custody of all documents and for effecting service as provided for by these Rules.

2. The Registrar shall assist the Members of the Court in all their official functions.

3. The Registrar shall have custody of the seals and shall be responsible for the records. He shall be in charge of the publications of the Court and, in particular, the European Court Reports.

4. The Registrar shall direct the services of the Court under the authority of the President of the Court. He shall be responsible for the management of the staff and the administration, and for the preparation and implementation of the budget.

Article 21

Keeping of the register

1. There shall be kept in the Registry, under the responsibility of the Registrar, a register in which all procedural documents and supporting items and documents lodged shall be entered in the order in which they are submitted.

2. When a document has been registered, the Registrar shall make a note to that effect on the original and, if a party so requests, on any copy submitted for the purpose.

3. Entries in the register and the notes provided for in the preceding paragraph shall be authentic.

4. A notice shall be published in the *Official Journal of the European Union* indicating the date of registration of an application initiating proceedings, the names of the parties, the form of order sought by the applicant and a summary of the pleas in law and of the main supporting arguments or, as the case may be, the date of lodging of a request for a preliminary ruling, the identity of the referring court or tribunal and the parties to the main proceedings, and the questions referred to the Court.

Article 22

Consultation of the register and of judgments and orders

1. Anyone may consult the register at the Registry and may obtain copies or extracts on payment of a charge on a scale fixed by the Court on a proposal from the Registrar.

2. The parties to a case may, on payment of the appropriate charge, obtain certified copies of procedural documents.

3. Anyone may, on payment of the appropriate charge, also obtain certified copies of judgments and orders.

Chapter 6

THE WORKING OF THE COURT

Article 23

Location of the sittings of the Court

The Court may choose to hold one or more specific sittings in a place other than that in which it has its seat.

Article 24

Calendar of the Court's judicial business

1. The judicial year shall begin on 7 October of each calendar year and end on 6 October of the following year.

2. The judicial vacations shall be determined by the Court.

3. In a case of urgency, the President may convene the Judges and the Advocates General during the judicial vacations.

4. The Court shall observe the official holidays of the place in which it has its seat.

5. The Court may, in proper circumstances, grant leave of absence to any Judge or Advocate General.

6. The dates of the judicial vacations and the list of official holidays shall be published annually in the *Official Journal of the European Union*.

Article 25

General meeting

Decisions concerning administrative issues or the action to be taken upon the proposals contained in the preliminary report referred to in Article 59 of these Rules shall be taken by the Court at the general meeting in which all the Judges and Advocates General shall take part and have a vote. The Registrar shall be present, unless the Court decides to the contrary.

Article 26

Drawing-up of minutes

Where the Court sits without the Registrar being present it shall, if necessary, instruct the most junior Judge for the purposes of Article 7 of these Rules to draw up minutes, which shall be signed by that Judge and by the President.

Chapter 7

FORMATIONS OF THE COURT

Section 1. Composition of the formations of the Court

Article 27

Composition of the Grand Chamber

1. The Grand Chamber shall, for each case, be composed of the President and the Vice-President of the Court, three Presidents of Chambers of five Judges, the Judge-Rapporteur and the number of Judges necessary to reach 15. The last-mentioned Judges and the three Presidents of Chambers of five Judges shall be designated from the lists referred to in paragraphs 3 and 4 of this Article, following the order laid down therein. The starting-point on each of those lists, in every case assigned to the Grand Chamber, shall be the name of the Judge immediately following the last Judge designated from the list concerned for the preceding case assigned to that formation of the Court.

2. After the election of the President and the Vice-President of the Court, and then of the Presidents of the Chambers of five Judges, a list of the Presidents of Chambers of five Judges and a list of the other Judges shall be drawn up for the purposes of determining the composition of the Grand Chamber.

3. The list of the Presidents of Chambers of five Judges shall be drawn up according to the order laid down in Article 7 of these Rules.

4. The list of the other Judges shall be drawn up according to the order laid down in Article 7 of these Rules, alternating with the reverse order: the first Judge on that list shall be the first according to the order laid down in that Article, the second Judge shall be the last according to that order, the third Judge shall be the second according to that order, the fourth Judge the penultimate according to that order, and so on.

5. The lists referred to in paragraphs 3 and 4 shall be published in the *Official Journal of the European Union*.

6. In cases which are assigned to the Grand Chamber between the beginning of a calendar year in which there is a partial replacement of Judges and the moment when that replacement has taken place, two substitute Judges may be designated to complete the formation of the Court for so long as the attainment of the quorum referred to in the third paragraph of Article 17 of the Statute is in doubt. Those substitute Judges shall be the two Judges appearing on the list referred to in paragraph 4 immediately after the last Judge designated for the composition of the Grand Chamber in the case.

7. The substitute Judges shall replace, in the order of the list referred to in paragraph 4, such Judges as are unable to take part in the determination of the case.

Article 28

Composition of the Chambers of five and of three Judges

1. The Chambers of five Judges and of three Judges shall, for each case, be composed of the President of the Chamber, the Judge-Rapporteur and the number of Judges required to attain the number of five and three Judges respectively. Those last-mentioned Judges shall be designated from the lists referred to in paragraphs 2 and 3, following the order laid down therein. The starting-point on those lists, in every case assigned to a Chamber, shall be the name of the Judge immediately following the last Judge designated from the list for the preceding case assigned to the Chamber concerned.

2. For the composition of the Chambers of five Judges, after the election of the Presidents of those Chambers lists shall be drawn up including all the Judges attached to the Chamber concerned, with the exception of its President. The lists shall be drawn up in the same way as the list referred to in Article 27(4).

3. For the composition of the Chambers of three Judges, after the election of the Presidents of those Chambers lists shall be drawn up including all the Judges attached to the Chamber concerned, with the exception of its President. The lists shall be drawn up according to the order laid down in Article 7.

4. The lists referred to in paragraphs 2 and 3 shall be published in the *Official Journal of the European Union*.

Article 29

Composition of Chambers where cases are related or referred back

1. Where the Court considers that a number of cases must be heard and determined together by one and the same formation of the Court, the composition of that formation shall be that fixed for the case in respect of which the preliminary report was examined first.

2. Where a Chamber to which a case has been assigned requests the Court, pursuant to Article 60(3) of these Rules, to assign the case to a formation composed of a greater number of Judges, that formation shall include the members of the Chamber which has referred the case back.

Article 30

Where a President of a Chamber is prevented from acting

1. When the President of a Chamber of five Judges is prevented from acting, the functions of President of the Chamber shall be exercised by a President of a Chamber of three Judges, where necessary according to the order laid down in Article 7 of these Rules, or, if that formation of the Court does not include a President of a Chamber of three Judges, by one of the other Judges according to the order laid down in Article 7.

2. When the President of a Chamber of three Judges is prevented from acting, the functions of President of the Chamber shall be exercised by a Judge of that formation of the Court according to the order laid down in Article 7.

Article 31

Where a member of the formation of the Court is prevented from acting

1. When a member of the Grand Chamber is prevented from acting, he shall be replaced by another Judge according to the order of the list referred to in Article 27(4).

2. When a member of a Chamber of five Judges is prevented from acting, he shall be replaced by another Judge of that Chamber, according to the order of the list referred to in Article 28(2). If it is not possible to replace the Judge prevented from acting by a Judge of the same Chamber, the President of that Chamber shall so inform the President of the Court who may designate another Judge to complete the Chamber.

3. When a member of a Chamber of three Judges is prevented from acting, he shall be replaced by another Judge of that Chamber, according to the order of the list referred to in Article 28(3). If it is not possible to replace the Judge prevented from acting by a Judge of the same Chamber, the President of that Chamber shall so inform the President of the Court who may designate another Judge to complete the Chamber.

Section 2. Deliberations

Article 32

Procedures concerning deliberations

1. The deliberations of the Court shall be and shall remain secret.

2. When a hearing has taken place, only those Judges who participated in that hearing and, where relevant, the Assistant Rapporteur responsible for the consideration of the case shall take part in the deliberations.

3. Every Judge taking part in the deliberations shall state his opinion and the reasons for it.

4. The conclusions reached by the majority of the Judges after final discussion shall determine the decision of the Court.

Article 33

Number of Judges taking part in the deliberations

Where, by reason of a Judge being prevented from acting, there is an even number of Judges, the most junior Judge for the purposes of Article 7 of these Rules shall abstain from taking part in the deliberations unless he is the Judge-Rapporteur. In that case the Judge immediately senior to him shall abstain from taking part in the deliberations.

Article 34

Quorum of the Grand Chamber

1. If, for a case assigned to the Grand Chamber, it is not possible to attain the quorum referred to in the third paragraph of Article 17 of the Statute, the President of the Court shall designate one or more other Judges according to the order of the list referred to in Article 27(4) of these Rules.

2. If a hearing has taken place before that designation, the Court shall re-hear oral argument from the parties and the Opinion of the Advocate General.

Article 35

Quorum of the Chambers of five and of three Judges

1. If, for a case assigned to a Chamber of five or of three Judges, it is not possible to attain the quorum referred to in the second paragraph of Article 17 of the Statute, the President of the Court shall designate one or more other Judges according to the order of the list referred to in Article 28(2) or (3), respectively, of these Rules. If it is not possible to replace the Judge prevented from acting by a Judge of the same Chamber, the President of that Chamber shall so inform the President of the Court forthwith who shall designate another Judge to complete the Chamber.

2. Article 34(2) shall apply, *mutatis mutandis*, to the Chambers of five and of three Judges.

Chapter 8

LANGUAGES

Article 36

Language of a case

The language of a case shall be Bulgarian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Irish, Italian, Latvian, Lithuanian, Maltese, Polish, Portuguese, Romanian, Slovak, Slovene, Spanish or Swedish.

Article 37

Determination of the language of a case

1. In direct actions, the language of a case shall be chosen by the applicant, except that:

(a) where the defendant is a Member State, the language of the case shall be the official language of that State; where that State has more than one official language, the applicant may choose between them;

(b) at the joint request of the parties, the use of another of the languages mentioned in Article 36 for all or part of the proceedings may be authorised;

(c) at the request of one of the parties, and after the opposite party and the Advocate General have been heard, the use of another of the languages mentioned in Article 36 may be authorised as the language of the case for all or part of the proceedings by way of derogation from subparagraphs (a) and (b); such a request may not be submitted by one of the institutions of the European Union.

2. Without prejudice to the provisions of paragraph 1(b) and (c), and of Article 38(4) and (5) of these Rules,

(a) in appeals against decisions of the General Court as referred to in Articles 56 and 57 of the Statute, the language of the case shall be the language of the decision of the General Court against which the appeal is brought;

(b) where, in accordance with the second paragraph of Article 62 of the Statute, the Court decides to review a decision of the General Court, the language of the case shall be the language of the decision of the General Court which is the subject of review;

(c) in the case of challenges concerning the costs to be recovered, applications to set aside judgments by default, third-party proceedings and applications for interpretation or revision of a judgment or for the Court to remedy a failure to adjudicate, the language of the case shall be the language of the decision to which those applications or challenges relate.

3. In preliminary ruling proceedings, the language of the case shall be the language of the referring court or tribunal. At the duly substantiated request of one of the parties to the main proceedings, and after the other party to the main proceedings and the Advocate General have been heard, the use of another of the languages mentioned in Article 36 may be authorised for the oral part of the procedure. Where granted, such authorisation shall apply in respect of all the interested persons referred to in Article 23 of the Statute.

4. Requests as above may be decided on by the President; the latter may, and where he wishes to accede to a request without the agreement of all the parties must, refer the request to the Court.

Article 38

Use of the language of the case

1. The language of the case shall in particular be used in the written and oral pleadings of the parties, including the items and documents produced or annexed to them, and also in the minutes and decisions of the Court.

2. Any item or document produced or annexed that is expressed in another language must be accompanied by a translation into the language of the case.

3. However, in the case of substantial items or lengthy documents, translations may be confined to extracts. At any time the Court may, of its own motion or at the request of one of the parties, call for a complete or fuller translation.

4. Notwithstanding the foregoing provisions, a Member State shall be entitled to use its official language when taking part in preliminary ruling proceedings, when intervening in a case before the Court or when bringing a matter before the Court pursuant to Article 259 TFEU. This provision shall apply both to written documents and to oral statements. The Registrar shall arrange in each instance for translation into the language of the case.

5. The States, other than the Member States, which are parties to the EEA Agreement, and also the EFTA Surveillance Authority, may be authorised to use one of the languages mentioned in Article 36, other than the language of the case, when they take part in preliminary ruling proceedings or intervene in a case before the Court. This provision shall apply both to written documents and to oral statements. The Registrar shall arrange in each instance for translation into the language of the case.

6. Non-Member States taking part in preliminary ruling proceedings pursuant to the fourth paragraph of Article 23 of the Statute may be authorised to use one of the languages mentioned in Article 36 other than the language of the case. This provision shall apply both to written documents and to oral statements. The Registrar shall arrange in each instance for translation into the language of the case.

7. Where a witness or expert states that he is unable adequately to express himself in one of the languages referred to in Article 36, the Court may authorise him to give his evidence in another language. The Registrar shall arrange for translation into the language of the case.

8. The President and the Vice-President of the Court and also the Presidents of Chambers in conducting oral proceedings, Judges and Advocates General in putting questions and Advocates General in delivering their Opinions may use one of the languages referred to in Article 36 other than the language of the case. The Registrar shall arrange for translation into the language of the case.

Article 39

Responsibility of the Registrar concerning language arrangements

The Registrar shall, at the request of any Judge, of the Advocate General or of a party, arrange for anything said or written in the course of the proceedings before the Court to be translated into the languages chosen from those referred to in Article 36.

Article 40

Languages of the publications of the Court

Publications of the Court shall be issued in the languages referred to in Article 1 of Council Regulation No 1.

Article 41

Authentic texts

The texts of documents drawn up in the language of the case or, where applicable, in another language authorised pursuant to Articles 37 or 38 of these Rules shall be authentic.

Article 42

Language service of the Court

The Court shall set up a language service staffed by experts with adequate legal training and a thorough knowledge of several official languages of the European Union.

TITLE II

COMMON PROCEDURAL PROVISIONS

Chapter 1

RIGHTS AND OBLIGATIONS OF AGENTS, ADVISERS AND LAWYERS

Article 43

Privileges, immunities and facilities

1. Agents, advisers and lawyers who appear before the Court or before any judicial authority to which the Court has addressed letters rogatory shall enjoy immunity in respect of words spoken or written by them concerning the case or the parties.

2. Agents, advisers and lawyers shall also enjoy the following privileges and facilities:

(a) any papers and documents relating to the proceedings shall be exempt from both search and seizure. In the event of a dispute, the customs officials or police may seal those papers and documents; they shall then be immediately forwarded to the Court for inspection in the presence of the Registrar and of the person concerned;

(b) agents, advisers and lawyers shall be entitled to travel in the course of duty without hindrance.

Article 44

Status of the parties' representatives

1. In order to qualify for the privileges, immunities and facilities specified in Article 43, persons entitled to them shall furnish proof of their status as follows:

(a) agents shall produce an official document issued by the party for whom they act, who shall immediately serve a copy thereof on the Registrar;

(b) lawyers shall produce a certificate that they are authorised to practise before a court of a Member State or of another State which is a party to the EEA Agreement, and, where the party which they represent is a legal person governed by private law, an authority to act issued by that person;

(c) advisers shall produce an authority to act issued by the party whom they are assisting.

2. The Registrar of the Court shall issue them with a certificate, as required. The validity of this certificate shall be limited to a specified period, which may be extended or curtailed according to the duration of the proceedings.

Article 45

Waiver of immunity

1. The privileges, immunities and facilities specified in Article 43 of these Rules are granted exclusively in the interests of the proper conduct of proceedings.

2. The Court may waive immunity where it considers that the proper conduct of proceedings will not be hindered thereby.

Article 46

Exclusion from the proceedings

1. If the Court considers that the conduct of an agent, adviser or lawyer before the Court is incompatible with the dignity of the Court or with the requirements of the proper administration of justice, or that such agent, adviser or lawyer is using his rights for purposes other than those for which they were granted, it shall inform the person concerned. If the Court informs the competent authorities to whom the person concerned is answerable, a copy of the letter sent to those authorities shall be forwarded to the person concerned.

2. On the same grounds, the Court may at any time, having heard the person concerned and the Advocate General, decide to exclude an agent, adviser or lawyer from the proceedings by reasoned order. That order shall have immediate effect.

3. Where an agent, adviser or lawyer is excluded from the proceedings, the proceedings shall be suspended for a period fixed by the President in order to allow the party concerned to appoint another agent, adviser or lawyer.

4. Decisions taken under this Article may be rescinded.

Article 47

University teachers and parties to the main proceedings

1. The provisions of this Chapter shall apply to university teachers who have a right of audience before the Court in accordance with Article 19 of the Statute.

2. They shall also apply, in the context of references for a preliminary ruling, to the parties to the main proceedings where, in accordance with the national rules of procedure applicable, those parties are permitted to bring or defend court proceedings without being represented by a lawyer, and to persons authorised under those rules to represent them.

Chapter 2

SERVICE

Article 48

Methods of service

1. Where these Rules require that a document be served on a person, the Registrar shall ensure that service is effected at that person's address for service either by the dispatch of a copy of the document by registered post with a form for acknowledgement of receipt or by personal delivery of the copy against a receipt. The Registrar shall prepare and certify the copies of documents to be served, save where the parties themselves supply the copies in accordance with Article 57(2) of these Rules.

2. Where the addressee has agreed that service is to be effected on him by telefax or any other technical means of communication, any procedural document, including a judgment or order of the Court, may be served by the transmission of a copy of the document by such means.

3. Where, for technical reasons or on account of the nature or length of the document, such transmission is impossible or impracticable, the document shall be served, if the addressee has not specified an address for service, at his address in accordance with the procedures laid down in paragraph 1 of this Article. The addressee shall be so informed by telefax or any other technical means of communication. Service shall then be deemed to have been effected on the addressee by registered post on the 10th day following the lodging of the registered letter at the post office of the place in which the Court has its seat, unless it is shown by the acknowledgement of receipt that the letter was received on a different date or the addressee informs the Registrar, within three weeks of being informed by telefax or any other technical means of communication, that the document to be served has not reached him.

4. The Court may, by decision, determine the criteria for a procedural document to be served by electronic means. That decision shall be published in the *Official Journal of the European Union*.

Chapter 3

TIME-LIMITS

Article 49

Calculation of time-limits

1. Any procedural time-limit prescribed by the Treaties, the Statute or these Rules shall be calculated as follows:

(a) where a time-limit expressed in days, weeks, months or years is to be calculated from the moment at which an event occurs or an action takes place, the day during which that event occurs or that action takes place shall not be counted as falling within the time-limit in question;

(b) a time-limit expressed in weeks, months or years shall end with the expiry of whichever day in the last week, month or year is the same day of the week, or falls on the same date, as the day during which the event or action from which the time-limit is to be calculated occurred or took place. If, in a time-limit expressed in months or years, the day on which it should expire does not occur in the last month, the time-limit shall end with the expiry of the last day of that month;

(c) where a time-limit is expressed in months and days, it shall first be calculated in whole months, then in days;

(d) time-limits shall include Saturdays, Sundays and the official holidays referred to in Article 24(6) of these Rules;

(e) time-limits shall not be suspended during the judicial vacations.

2. If the time-limit would otherwise end on a Saturday, Sunday or an official holiday, it shall be extended until the end of the first subsequent working day.

Article 50

Proceedings against a measure adopted by an institution

Where the time-limit allowed for initiating proceedings against a measure adopted by an institution runs from the publication of that measure, that time-limit shall be calculated, for the purposes of Article 49(1)(a), from the end of the 14th day after publication of the measure in the *Official Journal of the European Union*.

Article 51

Extension on account of distance

The procedural time-limits shall be extended on account of distance by a single period of 10 days.

Article 52

Setting and extension of time-limits

1. Any time-limit prescribed by the Court pursuant to these Rules may be extended.

2. The President and the Presidents of Chambers may delegate to the Registrar power of signature for the purposes of setting certain time-limits which, pursuant to these Rules, it falls to them to prescribe, or of extending such time-limits.

Chapter 4

DIFFERENT PROCEDURES FOR DEALING WITH CASES

Article 53

Procedures for dealing with cases

1. Without prejudice to the special provisions laid down in the Statute or in these Rules, the procedure before the Court shall consist of a written part and an oral part.

2. Where it is clear that the Court has no jurisdiction to hear and determine a case or where a request or an application is manifestly inadmissible, the Court may, after hearing the Advocate General, at any time decide to give a decision by reasoned order without taking further steps in the proceedings.

3. The President may in special circumstances decide that a case be given priority over others.

4. A case may be dealt with under an expedited procedure in accordance with the conditions provided by these Rules.

5. A reference for a preliminary ruling may be dealt with under an urgent procedure in accordance with the conditions provided by these Rules.

Article 54

Joinder

1. Two or more cases of the same type concerning the same subject-matter may at any time be joined, on account of the connection between them, for the purposes of the written or oral part of the procedure or of the judgment which closes the proceedings.

2. A decision on whether cases should be joined shall be taken by the President after hearing the Judge-Rapporteur and the Advocate General, if the cases concerned have already been assigned, and, save in the case of references for a preliminary ruling, after also hearing the parties. The President may refer the decision on this matter to the Court.

3. Joined cases may be disjoined, in accordance with the provisions of paragraph 2.

Article 55

Stay of proceedings

1. The proceedings may be stayed:

(a) in the circumstances specified in the third paragraph of Article 54 of the Statute, by order of the Court, made after hearing the Advocate General;

(b) in all other cases, by decision of the President adopted after hearing the Judge-Rapporteur and the Advocate General and, save in the case of references for a preliminary ruling, the parties.

2. The proceedings may be resumed by order or decision, following the same procedure.

3. The orders or decisions referred to in paragraphs 1 and 2 shall be served on the parties or interested persons referred to in Article 23 of the Statute.

4. The stay of proceedings shall take effect on the date indicated in the order or decision of stay or, in the absence of such indication, on the date of that order or decision.

5. While proceedings are stayed time shall cease to run for the parties or interested persons referred to in Article 23 of the Statute for the purposes of procedural time-limits.

6. Where the order or decision of stay does not fix the length of stay, it shall end on the date indicated in the order or decision of resumption or, in the absence of such indication, on the date of the order or decision of resumption.

7. From the date of resumption of proceedings following a stay, the suspended procedural time-limits shall be replaced by new time-limits and time shall begin to run from the date of that resumption.

Article 56

Deferment of the determination of a case

After hearing the Judge-Rapporteur, the Advocate General and the parties, the President may in special circumstances, either of his own motion or at the request of one of the parties, defer a case to be dealt with at a later date.

Chapter 5

WRITTEN PART OF THE PROCEDURE

Article 57

Lodging of procedural documents

1. The original of every procedural document must bear the handwritten signature of the party's agent or lawyer or, in the case of observations submitted in the context of preliminary ruling proceedings, that of the party to the main proceedings or his representative, if the national rules of procedure applicable to those main proceedings so permit.

2. The original, accompanied by all annexes referred to therein, shall be submitted together with five copies for the Court and, in the case of proceedings other than preliminary ruling proceedings, a copy for every other party to the proceedings. Copies shall be certified by the party lodging them.

3. The institutions shall in addition produce, within time-limits laid down by the Court, translations of any procedural document into the other languages provided for by Article 1 of Council Regulation No 1. The preceding paragraph of this Article shall apply.

4. To every procedural document there shall be annexed a file containing the items and documents relied on in support of it, together with a schedule listing them.

5. Where in view of the length of an item or document only extracts from it are annexed to the procedural document, the whole item or document or a full copy of it shall be lodged at the Registry.

6. All procedural documents shall bear a date. In the calculation of procedural time-limits, only the date and time of lodgment of the original at the Registry shall be taken into account.

7. Without prejudice to the provisions of paragraphs 1 to 6, the date on and time at which a copy of the signed original of a procedural document, including the schedule of items and documents referred to in paragraph 4, is received at the Registry by telefax or any other technical means of communication available to the Court shall be deemed to be the date and time of lodgment for the purposes of compliance with the procedural time-limits, provided that the signed original of the procedural document, accompanied by the annexes and copies referred to in paragraph 2, is lodged at the Registry no later than 10 days thereafter.

8. Without prejudice to paragraphs 3 to 6, the Court may, by decision, determine the criteria for a procedural document sent to the Registry by electronic means to be deemed to be the original of that document. That decision shall be published in the *Official Journal of the European Union*.

Article 58

Length of procedural documents

Without prejudice to any special provisions laid down in these Rules, the Court may, by decision, set the maximum length of written pleadings or observations lodged before it. That decision shall be published in the *Official Journal of the European Union*.

Chapter 6

THE PRELIMINARY REPORT AND ASSIGNMENT OF CASES TO FORMATIONS OF THE COURT

Article 59

Preliminary report

1. When the written part of the procedure is closed, the President shall fix a date on which the Judge-Rapporteur is to present a preliminary report to the general meeting of the Court.

2. The preliminary report shall contain proposals as to whether particular measures of organisation of procedure, measures of inquiry or, if appropriate, requests to the referring court or tribunal for clarification should be undertaken, and as to the formation to which the case should be

assigned. It shall also contain the Judge-Rapporteur's proposals, if any, as to whether to dispense with a hearing and as to whether to dispense with an Opinion of the Advocate General pursuant to the fifth paragraph of Article 20 of the Statute.

3. The Court shall decide, after hearing the Advocate General, what action to take on the proposals of the Judge-Rapporteur.

Article 60

Assignment of cases to formations of the Court

1. The Court shall assign to the Chambers of five and of three Judges any case brought before it in so far as the difficulty or importance of the case or particular circumstances are not such as to require that it should be assigned to the Grand Chamber, unless a Member State or an institution of the European Union participating in the proceedings has requested that the case be assigned to the Grand Chamber, pursuant to the third paragraph of Article 16 of the Statute.

2. The Court shall sit as a full Court where cases are brought before it pursuant to the provisions referred to in the fourth paragraph of Article 16 of the Statute. It may assign a case to the full Court where, in accordance with the fifth paragraph of Article 16 of the Statute, it considers that the case is of exceptional importance.

3. The formation to which a case has been assigned may, at any stage of the proceedings, request the Court to assign the case to a formation composed of a greater number of Judges.

4. Where the oral part of the procedure is opened without an inquiry, the President of the formation determining the case shall fix the opening date.

Chapter 7

MEASURES OF ORGANISATION OF PROCEDURE AND MEASURES OF INQUIRY

Section 1. Measures of organisation of procedure

Article 61

Measures of organisation prescribed by the Court

1. In addition to the measures which may be prescribed in accordance with Article 24 of the Statute, the Court may invite the parties or the interested persons referred to in Article 23 of the Statute to answer certain questions in writing, within the time-limit laid down by the Court, or at the hearing. The written replies shall be communicated to the other parties or the interested persons referred to in Article 23 of the Statute.

2. Where a hearing is organised, the Court shall, in so far as possible, invite the participants in that hearing to concentrate in their oral pleadings on one or more specified issues.

Article 62

Measures of organisation prescribed by the Judge-Rapporteur or the Advocate General

1. The Judge-Rapporteur or the Advocate General may request the parties or the interested persons referred to in Article 23 of the Statute to submit within a specified time-limit all such information relating to the facts, and all such documents or other particulars, as they may consider relevant. The replies and documents provided shall be communicated to the other parties or the interested persons referred to in Article 23 of the Statute.

2. The Judge-Rapporteur or the Advocate General may also send to the parties or the interested persons referred to in Article 23 of the Statute questions to be answered at the hearing.

Section 2. Measures of inquiry

Article 63

Decision on measures of inquiry

1. The Court shall decide in its general meeting whether a measure of inquiry is necessary.

2. Where the case has already been assigned to a formation of the Court, the decision shall be taken by that formation.

Article 64

Determination of measures of inquiry

1. The Court, after hearing the Advocate General, shall prescribe the measures of inquiry that it considers appropriate by means of an order setting out the facts to be proved.

2. Without prejudice to Articles 24 and 25 of the Statute, the following measures of inquiry may be adopted:

(a) the personal appearance of the parties;

(b) a request for information and production of documents;

(c) oral testimony;

(d) the commissioning of an expert's report;

(e) an inspection of the place or thing in question.

3. Evidence may be submitted in rebuttal and previous evidence may be amplified.

Article 65

Participation in measures of inquiry

1. Where the formation of the Court does not undertake the inquiry itself, it shall entrust the task of so doing to the Judge-Rapporteur.

2. The Advocate General shall take part in the measures of inquiry.

3. The parties shall be entitled to attend the measures of inquiry.

Article 66

Oral testimony

1. The Court may, either of its own motion or at the request of one of the parties, and after hearing the Advocate General, order that certain facts be proved by witnesses.

2. A request by a party for the examination of a witness shall state precisely about what facts and for what reasons the witness should be examined.

3. The Court shall rule by reasoned order on the request referred to in the preceding paragraph. If the request is granted, the order shall set out the facts to be established and state which witnesses are to be heard in respect of each of those facts.

4. Witnesses shall be summoned by the Court, where appropriate after lodgment of the security provided for in Article 73(1) of these Rules.

Article 67

Examination of witnesses

1. After the identity of the witness has been established, the President shall inform him that he will be required to vouch the truth of his evidence in the manner laid down in these Rules.

2. The witness shall give his evidence to the Court, the parties having been given notice to attend. After the witness has given his evidence the President may, at the request of one of the parties or of his own motion, put questions to him.

3. The other Judges and the Advocate General may do likewise.

4. Subject to the control of the President, questions may be put to witnesses by the representatives of the parties.

Article 68

Witnesses' oath

1. After giving his evidence, the witness shall take the following oath:

'I swear that I have spoken the truth, the whole truth and nothing but the truth.'

2. The Court may, after hearing the parties, exempt a witness from taking the oath.

Article 69

Pecuniary penalties

1. Witnesses who have been duly summoned shall obey the summons and attend for examination.

2. If, without good reason, a witness who has been duly summoned fails to appear before the Court, the Court may impose upon him a pecuniary penalty not exceeding EUR 5 000 and may order that a further summons be served on the witness at his own expense.

3. The same penalty may be imposed upon a witness who, without good reason, refuses to give evidence or to take the oath.

Article 70

Expert's report

1. The Court may order that an expert's report be obtained. The order appointing the expert shall define his task and set a time-limit within which he is to submit his report.

2. After the expert has submitted his report and that report has been served on the parties, the Court may order that the expert be examined, the parties having been given notice to attend. At the request of one of the parties or of his own motion, the President may put questions to the expert.

3. The other Judges and the Advocate General may do likewise.

4. Subject to the control of the President, questions may be put to the expert by the representatives of the parties.

Article 71

Expert's oath

1. After making his report, the expert shall take the following oath:

'I swear that I have conscientiously and impartially carried out my task.'

2. The Court may, after hearing the parties, exempt the expert from taking the oath.

Article 72

Objection to a witness or expert

1. If one of the parties objects to a witness or an expert on the ground that he is not a competent or proper person to act as a witness or expert or for any other reason, or if a witness or expert refuses to give evidence or to take the oath, the matter shall be resolved by the Court.

2. An objection to a witness or an expert shall be raised within two weeks after service of the order summoning the witness or appointing the expert; the statement of objection must set out the grounds of objection and indicate the nature of any evidence offered.

Article 73

Witnesses' and experts' costs

1. Where the Court orders the examination of witnesses or an expert's report, it may request the parties or one of them to lodge security for the witnesses' costs or the costs of the expert's report.

2. Witnesses and experts shall be entitled to reimbursement of their travel and subsistence expenses. The cashier of the Court may make an advance payment towards these expenses.

3. Witnesses shall be entitled to compensation for loss of earnings, and experts to fees for their services. The cashier of the Court shall pay witnesses and experts these sums after they have carried out their respective duties or tasks.

Article 74

Minutes of inquiry hearings

1. The Registrar shall draw up minutes of every inquiry hearing. The minutes shall be signed by the President and by the Registrar. They shall constitute an official record.

2. In the case of the examination of witnesses or experts, the minutes shall be signed by the President or by the Judge-Rapporteur responsible for conducting the examination of the witness or expert, and by the Registrar. Before the minutes are thus signed, the witness or expert must be given an opportunity to check the content of the minutes and to sign them.

3. The minutes shall be served on the parties.

Article 75

Opening of the oral part of the procedure after the inquiry

1. Unless the Court decides to prescribe a time-limit within which the parties may submit written observations, the President shall fix the date for the opening of the oral part of the procedure after the measures of inquiry have been completed.

2. Where a time-limit has been prescribed for the submission of written observations, the President shall fix the date for the opening of the oral part of the procedure after that time-limit has expired.

Chapter 8

ORAL PART OF THE PROCEDURE

Article 76

Hearing

1. Any reasoned requests for a hearing shall be submitted within three weeks after service on the parties or the interested persons referred to in Article 23 of the Statute of notification of the close of the written part of the procedure. That time-limit may be extended by the President.

2. On a proposal from the Judge-Rapporteur and after hearing the Advocate General, the Court may decide not to hold a hearing if it considers, on reading the written pleadings or observations lodged during the written part of the procedure, that it has sufficient information to give a ruling.

3. The preceding paragraph shall not apply where a request for a hearing, stating reasons, has been submitted by an interested person referred to in Article 23 of the Statute who did not participate in the written part of the procedure.

Article 77

Joint hearing

If the similarities between two or more cases of the same type so permit, the Court may decide to organise a joint hearing of those cases.

Article 78

Conduct of oral proceedings

Oral proceedings shall be opened and directed by the President, who shall be responsible for the proper conduct of the hearing.

Article 79

Cases heard in camera

1. For serious reasons related, in particular, to the security of the Member States or to the protection of minors, the Court may decide to hear a case *in camera*.

2. The oral proceedings in cases heard *in camera* shall not be published.

Article 80

Questions

The members of the formation of the Court and the Advocate General may in the course of the hearing put questions to the agents, advisers or lawyers of the parties and, in the circumstances referred to in Article 47(2) of these Rules, to the parties to the main proceedings or to their representatives.

Article 81

Close of the hearing

After the parties or the interested persons referred to in Article 23 of the Statute have presented oral argument, the President shall declare the hearing closed.

Article 82

Delivery of the Opinion of the Advocate General

1. Where a hearing takes place, the Opinion of the Advocate General shall be delivered after the close of that hearing.

2. The President shall declare the oral part of the procedure closed after the Advocate General has delivered his Opinion.

Article 83

Opening or reopening of the oral part of the procedure

The Court may at any time, after hearing the Advocate General, order the opening or reopening of the oral part of the procedure, in particular if it considers that it lacks sufficient information or where a party has, after the close of that part of the procedure, submitted a new fact which is of such a nature as to be a decisive factor for the decision of the Court, or where the case must be decided on the basis of an argument which has not been debated between the parties or the interested persons referred to in Article 23 of the Statute.

Article 84

Minutes of hearings

1. The Registrar shall draw up minutes of every hearing. The minutes shall be signed by the President and by the Registrar. They shall constitute an official record.

2. The parties and interested persons referred to in Article 23 of the Statute may inspect the minutes at the Registry and obtain copies.

Article 85

Recording of the hearing

The President may, on a duly substantiated request, authorise a party or an interested person referred to in Article 23 of the Statute who has participated in the written or oral part of the proceedings to listen, on the Court's premises, to the soundtrack of the hearing in the language used by the speaker during that hearing.

Chapter 9

JUDGMENTS AND ORDERS

Article 86

Date of delivery of a judgment

The parties or interested persons referred to in Article 23 of the Statute shall be informed of the date of delivery of a judgment.

Article 87

Content of a judgment

A judgment shall contain:

(a) a statement that it is the judgment of the Court,

(b) an indication as to the formation of the Court,

(c) the date of delivery,

(d) the names of the President and of the Judges who took part in the deliberations, with an indication as to the name of the Judge-Rapporteur,

(e) the name of the Advocate General,

(f) the name of the Registrar,

(g) a description of the parties or of the interested persons referred to in Article 23 of the Statute who participated in the proceedings,

(h) the names of their representatives,

(i) in the case of direct actions and appeals, a statement of the forms of order sought by the parties,

(j) where applicable, the date of the hearing,

(k) a statement that the Advocate General has been heard and, where applicable, the date of his Opinion,

(l) a summary of the facts,

(m) the grounds for the decision,

(n) the operative part of the judgment, including, where appropriate, the decision as to costs.

Article 88

Delivery and service of the judgment

1. The judgment shall be delivered in open court.

2. The original of the judgment, signed by the President, by the Judges who took part in the deliberations and by the Registrar, shall be sealed and deposited at the Registry; certified copies of the judgment shall be served on the parties and, where applicable, the referring court or tribunal, the interested persons referred to in Article 23 of the Statute and the General Court.

Article 89

Content of an order

1. An order shall contain:

(a) a statement that it is the order of the Court,

(b) an indication as to the formation of the Court,

(c) the date of its adoption,

(d) an indication as to the legal basis of the order,

(e) the names of the President and, where applicable, the Judges who took part in the deliberations, with an indication as to the name of the Judge-Rapporteur,

(f) the name of the Advocate General,

(g) the name of the Registrar,

(h) a description of the parties or of the parties to the main proceedings,

(i) the names of their representatives,

(j) a statement that the Advocate General has been heard,

(k) the operative part of the order, including, where appropriate, the decision as to costs.

2. Where, in accordance with these Rules, an order must be reasoned, it shall in addition contain:

(a) in the case of direct actions and appeals, a statement of the forms of order sought by the parties,

(b) a summary of the facts,

(c) the grounds for the decision.

Article 90

Signature and service of the order

The original of the order, signed by the President and by the Registrar, shall be sealed and deposited at the Registry; certified copies of the order shall be served on the parties and, where applicable, the referring court or tribunal, the interested persons referred to in Article 23 of the Statute and the General Court.

Article 91

Binding nature of judgments and orders

1. A judgment shall be binding from the date of its delivery.

2. An order shall be binding from the date of its service.

Article 92

Publication in the Official Journal of the European Union

A notice containing the date and the operative part of the judgment or order of the Court which closes the proceedings shall be published in the *Official Journal of the European Union*.

TITLE III

REFERENCES FOR A PRELIMINARY RULING

Chapter 1

GENERAL PROVISIONS

Article 93

Scope

The procedure shall be governed by the provisions of this Title:

(a) in the cases covered by Article 23 of the Statute,

(b) as regards references for interpretation which may be provided for by agreements to which the European Union or the Member States are parties.

Article 94

Content of the request for a preliminary ruling

In addition to the text of the questions referred to the Court for a preliminary ruling, the request for a preliminary ruling shall contain:

(a) a summary of the subject-matter of the dispute and the relevant findings of fact as determined by the referring court or tribunal, or, at least, an account of the facts on which the questions are based;

(b) the tenor of any national provisions applicable in the case and, where appropriate, the relevant national case-law;

(c) a statement of the reasons which prompted the referring court or tribunal to inquire about the interpretation or validity of certain provisions of European Union law, and the relationship between those provisions and the national legislation applicable to the main proceedings.

Article 95

Anonymity

1. Where anonymity has been granted by the referring court or tribunal, the Court shall respect that anonymity in the proceedings pending before it.

2. At the request of the referring court or tribunal, at the duly reasoned request of a party to the main proceedings or of its own motion, the Court may also, if it considers it necessary, render anonymous one or more persons or entities concerned by the case.

Article 96

Participation in preliminary ruling proceedings

1. Pursuant to Article 23 of the Statute, the following shall be authorised to submit observations to the Court:

(a) the parties to the main proceedings,

(b) the Member States,

(c) the European Commission,

(d) the institution which adopted the act the validity or interpretation of which is in dispute,

(e) the States, other than the Member States, which are parties to the EEA Agreement, and also the EFTA Surveillance Authority, where a question concerning one of the fields of application of that Agreement is referred to the Court for a preliminary ruling,

(f) non-Member States which are parties to an agreement relating to a specific subject-matter, concluded with the Council, where the agreement so provides and where a court or tribunal of a Member State refers to the Court of Justice for a preliminary ruling a question falling within the scope of that agreement.

2. Non-participation in the written part of the procedure does not preclude participation in the oral part of the procedure.

Article 97

Parties to the main proceedings

1. The parties to the main proceedings are those who are determined as such by the referring court or tribunal in accordance with national rules of procedure.

2. Where the referring court or tribunal informs the Court that a new party has been admitted to the main proceedings, when the proceedings before the Court are already pending, that party must accept the case as he finds it at the time when the Court was so informed. That party shall receive a copy of every procedural document already served on the interested persons referred to in Article 23 of the Statute.

3. As regards the representation and attendance of the parties to the main proceedings, the Court shall take account of the rules of procedure in force before the court or tribunal which made the reference. In the event of any doubt as to whether a person may under national law represent a party to the main proceedings, the Court may obtain information from the referring court or tribunal on the rules of procedure applicable.

Article 98

Translation and service of the request for a preliminary ruling

1. The requests for a preliminary ruling referred to in this Title shall be served on the Member States in the original version, accompanied by a translation into the official language of the State to which they are being addressed. Where appropriate, on account of the length of the request, such translation shall be replaced by the translation into the official language of the State to which it is addressed of a summary of that request, which will serve as a basis for the position to be adopted by that State. The summary shall include the full text of the question or questions referred for a preliminary ruling. That summary shall contain, in particular, in so far as that information appears in the request for a preliminary ruling, the subject-matter of the main proceedings, the essential arguments of the parties to those proceedings, a succinct presentation of the reasons for the reference for a preliminary ruling and the case-law and the provisions of national law and European Union law relied on.

2. In the cases covered by the third paragraph of Article 23 of the Statute, the requests for a preliminary ruling shall be served on the States, other than the Member States, which are parties to the EEA Agreement and also on the EFTA Surveillance Authority in the original version, accompanied by a translation of the request, or where appropriate of a summary, into one of the languages referred to in Article 36, to be chosen by the addressee.

3. Where a non-Member State has the right to take part in preliminary ruling proceedings pursuant to the fourth paragraph of Article 23 of the Statute, the original version of the request for a preliminary ruling shall be served on it accompanied by a translation of the request, or where appropriate of a summary, into one of the languages referred to in Article 36, to be chosen by the non-Member State concerned.

Article 99

Reply by reasoned order

Where a question referred to the Court for a preliminary ruling is identical to a question on which the Court has already ruled, where the reply to such a question may be clearly deduced from existing case-law or where the answer to the question referred for a preliminary ruling admits of no reasonable doubt, the Court may at any time, on a proposal from the Judge-Rapporteur and after hearing the Advocate General, decide to rule by reasoned order.

Article 100

Circumstances in which the Court remains seised

1. The Court shall remain seised of a request for a preliminary ruling for as long as it is not withdrawn by the court or tribunal which made that request to the Court. The withdrawal of a request may be taken into account until notice of the date of delivery of the judgment has been served on the interested persons referred to in Article 23 of the Statute.

2. However, the Court may at any time declare that the conditions of its jurisdiction are no longer fulfilled.

Article 101

Request for clarification

1. Without prejudice to the measures of organisation of procedure and measures of inquiry provided for in these Rules, the Court may, after hearing the Advocate General, request clarification from the referring court or tribunal within a time-limit prescribed by the Court.

2. The reply of the referring court or tribunal to that request shall be served on the interested persons referred to in Article 23 of the Statute.

Article 102

Costs of the preliminary ruling proceedings

It shall be for the referring court or tribunal to decide as to the costs of the preliminary ruling proceedings.

Article 103

Rectification of judgments and orders

1. Clerical mistakes, errors in calculation and obvious inaccuracies affecting judgments or orders may be rectified by the Court, of its own motion or at the request of an interested person referred to in Article 23 of the Statute made within two weeks after delivery of the judgment or service of the order.

2. The Court shall take its decision after hearing the Advocate General.

3. The original of the rectification order shall be annexed to the original of the rectified decision. A note of this order shall be made in the margin of the original of the rectified decision.

Article 104

Interpretation of preliminary rulings

1. Article 158 of these Rules relating to the interpretation of judgments and orders shall not apply to decisions given in reply to a request for a preliminary ruling.

2. It shall be for the national courts or tribunals to assess whether they consider that sufficient guidance is given by a preliminary ruling, or whether it appears to them that a further reference to the Court is required.

Chapter 2

EXPEDITED PRELIMINARY RULING PROCEDURE

Article 105

Expedited procedure

1. At the request of the referring court or tribunal or, exceptionally, of his own motion, the President of the Court may, where the nature of the case requires that it be dealt with within a short time, after hearing the Judge-Rapporteur and the Advocate General, decide that a reference for a preliminary ruling is to be determined pursuant to an expedited procedure derogating from the provisions of these Rules.

2. In that event, the President shall immediately fix the date for the hearing, which shall be communicated to the interested persons referred to in Article 23 of the Statute when the request for a preliminary ruling is served.

3. The interested persons referred to in the preceding paragraph may lodge statements of case or written observations within a time-limit prescribed by the President, which shall not be less than 15 days. The President may request those interested persons to restrict the matters addressed in their statement of case or written observations to the essential points of law raised by the request for a preliminary ruling.

4. The statements of case or written observations, if any, shall be communicated to all the interested persons referred to in Article 23 of the Statute prior to the hearing.

5. The Court shall rule after hearing the Advocate General.

Article 106

Transmission of procedural documents

1. The procedural documents referred to in the preceding Article shall be deemed to have been lodged on the transmission to the Registry, by telefax or any other technical means of communication available to the Court, of a copy of the signed original and the items and documents relied on in support of it, together with the schedule referred to in Article 57(4). The original of the document and the annexes referred to above shall be sent to the Registry immediately.

2. Where the preceding Article requires that a document be served on or communicated to a person, such service or communication may be effected by transmission of a copy of the document by telefax or any other technical means of communication available to the Court and the addressee.

Chapter 3

URGENT PRELIMINARY RULING PROCEDURE

Article 107

Scope of the urgent preliminary ruling procedure

1. A reference for a preliminary ruling which raises one or more questions in the areas covered by Title V of Part Three of the Treaty on the Functioning of the European Union may, at the request of the referring court or tribunal or, exceptionally, of the Court's own motion, be dealt with under an urgent procedure derogating from the provisions of these Rules.

2. The referring court or tribunal shall set out the matters of fact and law which establish the urgency and justify the application of that exceptional procedure and shall, in so far as possible, indicate the answer that it proposes to the questions referred.

3. If the referring court or tribunal has not submitted a request for the urgent procedure to be applied, the President of the Court may, if the application of that procedure appears, prima facie, to be required, ask the Chamber referred to in Article 108 to consider whether it is necessary to deal with the reference under that procedure.

Article 108

Decision as to urgency

1. The decision to deal with a reference for a preliminary ruling under the urgent procedure shall be taken by the designated Chamber, acting on a proposal from the Judge-Rapporteur and after hearing the Advocate General. The composition of that Chamber shall be determined in accordance with Article 28(2) on the day on which the case is assigned to the Judge-Rapporteur if the application of the urgent procedure is requested by the referring court or tribunal, or, if the application of that procedure is considered at the request of the President of the Court, on the day on which that request is made.

2. If the case is connected with a pending case assigned to a Judge-Rapporteur who is not a member of the designated Chamber, that Chamber may propose to the President of the Court that the case be assigned to that Judge-Rapporteur. Where the case is reassigned to that Judge-Rapporteur, the Chamber of five Judges which includes him shall carry out the duties of the designated Chamber in respect of that case. Article 29(1) shall apply.

Article 109

Written part of the urgent procedure

1. A request for a preliminary ruling shall, where the referring court or tribunal has requested the application of the urgent procedure or where the President has requested the designated Chamber to consider whether it is necessary to deal with the reference under that procedure, be served forthwith by the Registrar on the parties to the main proceedings, on the Member State from which the reference is made, on the European Commission and on the institution which adopted the act the validity or interpretation of which is in dispute.

2. The decision as to whether or not to deal with the reference for a preliminary ruling under the urgent procedure shall be served immediately on the referring court or tribunal and on the parties, Member State and institutions referred to in

the preceding paragraph. The decision to deal with the reference under the urgent procedure shall prescribe the time-limit within which those parties or entities may lodge statements of case or written observations. The decision may specify the matters of law to which such statements of case or written observations must relate and may specify the maximum length of those documents.

3. Where a request for a preliminary ruling refers to an administrative procedure or judicial proceedings conducted in a Member State other than that from which the reference is made, the Court may invite that first Member State to provide all relevant information in writing or at the hearing.

4. As soon as the service referred to in paragraph 1 above has been effected, the request for a preliminary ruling shall also be communicated to the interested persons referred to in Article 23 of the Statute, other than the persons served, and the decision whether or not to deal with the reference for a preliminary ruling under the urgent procedure shall be communicated to those interested persons as soon as the service referred to in paragraph 2 has been effected.

5. The interested persons referred to in Article 23 of the Statute shall be informed as soon as possible of the likely date of the hearing.

6. Where the reference is not to be dealt with under the urgent procedure, the proceedings shall continue in accordance with the provisions of Article 23 of the Statute and the applicable provisions of these Rules.

Article 110

Service and information following the close of the written part of the procedure

1. Where a reference for a preliminary ruling is to be dealt with under the urgent procedure, the request for a preliminary ruling and the statements of case or written observations which have been lodged shall be served on the interested persons referred to in Article 23 of the Statute other than the parties and entities referred to in Article 109(1). The request for a preliminary ruling shall be accompanied by a translation, where appropriate of a summary, in accordance with Article 98.

2. The statements of case or written observations which have been lodged shall also be served on the parties and other interested persons referred to in Article 109(1).

3. The date of the hearing shall be communicated to the interested persons referred to in Article 23 of the Statute at the same time as the documents referred to in the preceding paragraphs are served.

Article 111

Omission of the written part of the procedure

The designated Chamber may, in cases of extreme urgency, decide to omit the written part of the procedure referred to in Article 109(2).

Article 112

Decision on the substance

The designated Chamber shall rule after hearing the Advocate General.

Article 113

Formation of the Court

1. The designated Chamber may decide to sit in a formation of three Judges. In that event, it shall be composed of the President of the designated Chamber, the Judge-Rapporteur and the first Judge or, as the case may be, the first two Judges designated from the list referred to in Article 28(2) on the date on which the composition of the designated Chamber is determined in accordance with Article 108(1).

2. The designated Chamber may also request the Court to assign the case to a formation composed of a greater number of Judges. The urgent procedure shall continue before the new formation of the Court, where necessary after the reopening of the oral part of the procedure.

Article 114

Transmission of procedural documents

Procedural documents shall be transmitted in accordance with Article 106.

Chapter 4

LEGAL AID

Article 115

Application for legal aid

1. A party to the main proceedings who is wholly or in part unable to meet the costs of the proceedings before the Court may at any time apply for legal aid.

2. The application shall be accompanied by all information and supporting documents making it possible to assess the applicant's financial situation, such as a certificate issued by a competent national authority attesting to his financial situation.

3. If the applicant has already obtained legal aid before the referring court or tribunal, he shall produce the decision of that court or tribunal and specify what is covered by the sums already granted.

Article 116

Decision on the application for legal aid

1. As soon as the application for legal aid has been lodged it shall be assigned by the President to the Judge-Rapporteur responsible for the case in the context of which the application has been made.

2. The decision to grant legal aid, in full or in part, or to refuse it shall be taken, on a proposal from the Judge-Rapporteur and after hearing the Advocate General, by the Chamber of three Judges to which the Judge-Rapporteur is assigned. The formation of the Court shall, in that event, be composed of the President of that Chamber, the Judge-Rapporteur and the first Judge or, as the case may be, the first two Judges designated from the list referred to in Article 28(3) on the date on which the application for legal aid is brought before that Chamber by the Judge-Rapporteur.

3. If the Judge-Rapporteur is not a member of a Chamber of three Judges, the decision shall be taken, under the same conditions, by the Chamber of five Judges to which he is assigned. In addition to the Judge-Rapporteur, the formation of the Court shall be composed of four Judges designated from the list referred to in Article 28(2) on the date on which the application for legal aid is brought before that Chamber by the Judge-Rapporteur.

4. The formation of the Court shall give its decision by way of order. Where the application for legal aid is refused in whole or in part, the order shall state the reasons for that refusal.

Article 117

Sums to be advanced as legal aid

Where legal aid is granted, the cashier of the Court shall be responsible, where applicable within the limits set by the formation of the Court, for costs involved in the assistance and representation of the applicant before the Court. At the request of the applicant or his representative, an advance on those costs may be paid.

Article 118

Withdrawal of legal aid

The formation of the Court which gave a decision on the application for legal aid may at any time, either of its own motion or on request, withdraw that legal aid if the circumstances which led to its being granted alter during the proceedings.

TITLE IV

DIRECT ACTIONS

Chapter 1

REPRESENTATION OF THE PARTIES

Article 119

Obligation to be represented

1. A party may be represented only by his agent or lawyer.

2. Agents and lawyers must lodge at the Registry an official document or an authority to act issued by the party whom they represent.

3. The lawyer acting for a party must also lodge at the Registry a certificate that he is authorised to practise before a court of a Member State or of another State which is a party to the EEA Agreement.

4. If those documents are not lodged, the Registrar shall prescribe a reasonable time-limit within which the party concerned is to produce them. If the applicant fails to produce the required documents within the time-limit prescribed, the Court shall, after hearing the Judge-Rapporteur and the Advocate General, decide whether the non-compliance with that procedural requirement renders the application or written pleading formally inadmissible.

Chapter 2

WRITTEN PART OF THE PROCEDURE

Article 120

Content of the application

An application of the kind referred to in Article 21 of the Statute shall state:

(a) the name and address of the applicant;

(b) the name of the party against whom the application is made;

(c) the subject-matter of the proceedings, the pleas in law and arguments relied on and a summary of those pleas in law;

(d) the form of order sought by the applicant;

(e) where appropriate, any evidence produced or offered.

Article 121

Information relating to service

1. For the purpose of the proceedings, the application shall state an address for service. It shall indicate the name of the person who is authorised and has expressed willingness to accept service.

2. In addition to, or instead of, specifying an address for service as referred to in paragraph 1, the application may state that the lawyer or agent agrees that service is to be effected on him by telefax or any other technical means of communication.

3. If the application does not comply with the requirements referred to in paragraphs 1 or 2, all service on the party concerned for the purpose of the proceedings shall be effected, for so long as the defect has not been cured, by registered letter addressed to the agent or lawyer of that party. By way of derogation from Article 48, service shall then be deemed to be duly effected by the lodging of the registered letter at the post office of the place in which the Court has its seat.

Article 122

Annexes to the application

1. The application shall be accompanied, where appropriate, by the documents specified in the second paragraph of Article 21 of the Statute.

2. An application submitted under Article 273 TFEU shall be accompanied by a copy of the special agreement concluded between the Member States concerned.

3. If an application does not comply with the requirements set out in paragraphs 1 or 2 of this Article, the Registrar shall prescribe a reasonable time-limit within which the applicant is to produce the abovementioned documents. If the applicant fails to put the application in order, the Court shall, after hearing the Judge-Rapporteur and the Advocate General, decide whether the non-compliance with these conditions renders the application formally inadmissible.

Article 123

Service of the application

The application shall be served on the defendant. In cases where Article 119(4) or Article 122(3) applies, service shall be effected as soon as the application has been put in order or the Court has declared it admissible notwithstanding the failure to observe the requirements set out in those two Articles.

Article 124

Content of the defence

1. Within two months after service on him of the application, the defendant shall lodge a defence, stating:

(a) the name and address of the defendant;

(b) the pleas in law and arguments relied on;

(c) the form of order sought by the defendant;

(d) where appropriate, any evidence produced or offered.

2. Article 121 shall apply to the defence.

3. The time-limit laid down in paragraph 1 may exceptionally be extended by the President at the duly reasoned request of the defendant.

Article 125

Transmission of documents

Where the European Parliament, the Council or the European Commission is not a party to a case, the Court shall send to them copies of the application and of the defence, without the annexes thereto, to enable them to assess whether the inapplicability of one of their acts is being invoked under Article 277 TFEU.

Article 126

Reply and rejoinder

1. The application initiating proceedings and the defence may be supplemented by a reply from the applicant and by a rejoinder from the defendant.

2. The President shall prescribe the time-limits within which those procedural documents are to be produced. He may specify the matters to which the reply or the rejoinder should relate.

Chapter 3

PLEAS IN LAW AND EVIDENCE

Article 127

New pleas in law

1. No new plea in law may be introduced in the course of proceedings unless it is based on matters of law or of fact which come to light in the course of the procedure.

2. Without prejudice to the decision to be taken on the admissibility of the plea in law, the President may, on a proposal from the Judge-Rapporteur and after hearing the Advocate General, prescribe a time-limit within which the other party may respond to that plea.

Article 128

Evidence produced or offered

1. In reply or rejoinder a party may produce or offer further evidence in support of his arguments. The party must give reasons for the delay in submitting such evidence.

2. The parties may, exceptionally, produce or offer further evidence after the close of the written part of the procedure. They must give reasons for the delay in submitting such evidence. The President may, on a proposal from the Judge-Rapporteur and after hearing the Advocate General, prescribe a time-limit within which the other party may comment on such evidence.

Chapter 4

INTERVENTION

Article 129

Object and effects of the intervention

1. The intervention shall be limited to supporting, in whole or in part, the form of order sought by one of the parties. It shall not confer the same procedural rights as those conferred on the parties and, in particular, shall not give rise to any right to request that a hearing be held.

2. The intervention shall be ancillary to the main proceedings. It shall become devoid of purpose if the case is removed from the register of the Court as a result of a party's discontinuance or withdrawal from the proceedings or of an agreement between the parties, or where the application is declared inadmissible.

3. The intervener must accept the case as he finds it at the time of his intervention.

4. Consideration may be given to an application to intervene which is made after the expiry of the time-limit prescribed in Article 130 but before the decision to open the oral part of the procedure provided for in Article 60(4). In that event, if the President allows the intervention, the intervener may submit his observations during the hearing, if it takes place.

Article 130

Application to intervene

1. An application to intervene must be submitted within six weeks of the publication of the notice referred to in Article 21(4).

2. The application to intervene shall contain:

(a) a description of the case;

(b) a description of the main parties;

(c) the name and address of the intervener;

(d) the form of order sought, in support of which the intervener is applying for leave to intervene;

(e) a statement of the circumstances establishing the right to intervene, where the application is submitted pursuant to the second or third paragraph of Article 40 of the Statute.

3. The intervener shall be represented in accordance with Article 19 of the Statute.

4. Articles 119, 121 and 122 of these Rules shall apply.

Article 131

Decision on applications to intervene

1. The application to intervene shall be served on the parties in order to obtain any written or oral observations they may wish to make on that application.

2. Where the application is submitted pursuant to the first or third paragraph of Article 40 of the Statute, the intervention shall be allowed by decision of the President and the intervener shall receive a copy of every procedural document served on the parties, provided that those parties have not, within 10 days after the service referred to in paragraph 1 has been effected, put forward observations on the application to intervene or identified secret or confidential items or documents which, if communicated to the intervener, the parties claim would be prejudicial to them.

3. In any other case, the President shall decide on the application to intervene by order or shall refer the application to the Court.

4. If the application to intervene is granted, the intervener shall receive a copy of every procedural document served on the parties, save, where applicable, for the secret or confidential items or documents excluded from such communication pursuant to paragraph 3.

Article 132

Submission of statements

1. The intervener may submit a statement in intervention within one month after communication of the procedural documents referred to in the preceding Article. That time-limit may be extended by the President at the duly reasoned request of the intervener.

2. The statement in intervention shall contain:

(a) the form of order sought by the intervener in support, in whole or in part, of the form of order sought by one of the parties;

(b) the pleas in law and arguments relied on by the intervener;

(c) where appropriate, any evidence produced or offered.

3. After the statement in intervention has been lodged, the President shall, where necessary, prescribe a time-limit within which the parties may reply to that statement.

Chapter 5

EXPEDITED PROCEDURE

Article 133

Decision relating to the expedited procedure

1. At the request of the applicant or the defendant, the President of the Court may, where the nature of the case requires that it be dealt with within a short time, after hearing the other party, the Judge-Rapporteur and the Advocate General, decide that a case is to be determined pursuant to an expedited procedure derogating from the provisions of these Rules.

2. The request for a case to be determined pursuant to an expedited procedure must be made by a separate document submitted at the same time as the application initiating proceedings or the defence, as the case may be, is lodged.

3. Exceptionally the President may also take such a decision of his own motion, after hearing the parties, the Judge-Rapporteur and the Advocate General.

Article 134

Written part of the procedure

1. Under the expedited procedure, the application initiating proceedings and the defence may be supplemented by a reply and a rejoinder only if the President, after hearing the Judge-Rapporteur and the Advocate General, considers this to be necessary.

2. An intervener may submit a statement in intervention only if the President, after hearing the Judge-Rapporteur and the Advocate General, considers this to be necessary.

Article 135

Oral part of the procedure

1. Once the defence has been submitted or, if the decision to determine the case pursuant to an expedited procedure is not made until after that pleading has been lodged, once that decision has been taken, the President shall fix a date for the hearing, which shall be communicated forthwith to the parties. He may postpone the date of the hearing where it is necessary to undertake measures of inquiry or where measures of organisation of procedure so require.

2. Without prejudice to Articles 127 and 128, a party may supplement his arguments and produce or offer evidence during the oral part of the procedure. The party must, however, give reasons for the delay in producing such further arguments or evidence.

Article 136

Decision on the substance

The Court shall give its ruling after hearing the Advocate General.

Chapter 6

COSTS

Article 137

Decision as to costs

A decision as to costs shall be given in the judgment or order which closes the proceedings.

Article 138

General rules as to allocation of costs

1. The unsuccessful party shall be ordered to pay the costs if they have been applied for in the successful party's pleadings.

2. Where there is more than one unsuccessful party the Court shall decide how the costs are to be shared.

3. Where each party succeeds on some and fails on other heads, the parties shall bear their own costs. However, if it appears justified in the circumstances of the case, the Court may order that one party, in addition to bearing its own costs, pay a proportion of the costs of the other party.

Article 139

Unreasonable or vexatious costs

The Court may order a party, even if successful, to pay costs which the Court considers that party to have unreasonably or vexatiously caused the opposite party to incur.

Article 140

Costs of interveners

1. The Member States and institutions which have intervened in the proceedings shall bear their own costs.

2. The States, other than the Member States, which are parties to the EEA Agreement, and also the EFTA Surveillance Authority, shall similarly bear their own costs if they have intervened in the proceedings.

3. The Court may order an intervener other than those referred to in the preceding paragraphs to bear his own costs.

Article 141

Costs in the event of discontinuance or withdrawal

1. A party who discontinues or withdraws from proceedings shall be ordered to pay the costs if they have been applied for in the other party's observations on the discontinuance.

2. However, at the request of the party who discontinues or withdraws from proceedings, the costs shall be borne by the other party if this appears justified by the conduct of that party.

3. Where the parties have come to an agreement on costs, the decision as to costs shall be in accordance with that agreement.

4. If costs are not claimed, the parties shall bear their own costs.

Article 142

Costs where a case does not proceed to judgment

Where a case does not proceed to judgment the costs shall be in the discretion of the Court.

Article 143

Costs of proceedings

Proceedings before the Court shall be free of charge, except that:

(a) where a party has caused the Court to incur avoidable costs the Court may, after hearing the Advocate General, order that party to refund them;

(b) where copying or translation work is carried out at the request of a party, the cost shall, in so far as the Registrar considers it excessive, be paid for by that party on the Registry's scale of charges referred to in Article 22.

Article 144

Recoverable costs

Without prejudice to the preceding Article, the following shall be regarded as recoverable costs:

(a) sums payable to witnesses and experts under Article 73 of these Rules;

(b) expenses necessarily incurred by the parties for the purpose of the proceedings, in particular the travel and subsistence expenses and the remuneration of agents, advisers or lawyers.

Article 145

Dispute concerning the costs to be recovered

1. If there is a dispute concerning the costs to be recovered, the Chamber of three Judges to which the Judge-Rapporteur who dealt with the case is assigned shall, on application by the party concerned and after hearing the opposite party and the Advocate General, make an order. In that event, the formation of the Court shall be composed of the President of that Chamber, the Judge-Rapporteur and the first Judge or, as the case may be, the first two Judges designated from the list referred to in Article 28(3) on the date on which the dispute is brought before that Chamber by the Judge-Rapporteur.

2. If the Judge-Rapporteur is not a member of a Chamber of three Judges, the decision shall be taken, under the same conditions, by the Chamber of five Judges to which he is assigned. In addition to the Judge-Rapporteur, the formation of the Court shall be composed of four Judges designated from the list referred to in Article 28(2) on the date on which the dispute is brought before that Chamber by the Judge-Rapporteur.

3. The parties may, for the purposes of enforcement, apply for an authenticated copy of the order.

Article 146

Procedure for payment

1. Sums due from the cashier of the Court and from its debtors shall be paid in euro.

2. Where costs to be recovered have been incurred in a currency other than the euro or where the steps in respect of which payment is due were taken in a country of which the euro is not the currency, the conversion shall be effected at the European Central Bank's official rates of exchange on the day of payment.

Chapter 7

AMICABLE SETTLEMENT, DISCONTINUANCE, CASES THAT DO NOT PROCEED TO JUDGMENT AND PRELIMINARY ISSUES

Article 147

Amicable settlement

1. If, before the Court has given its decision, the parties reach a settlement of their dispute and inform the Court of the abandonment of their claims, the President shall order the case to be removed from the register and shall give a decision as to costs in accordance with Article 141, having regard to any proposals made by the parties on the matter.

2. This provision shall not apply to proceedings under Articles 263 TFEU and 265 TFEU.

Article 148

Discontinuance

If the applicant informs the Court in writing or at the hearing that he wishes to discontinue the proceedings, the President shall order the case to be removed from the register and shall give a decision as to costs in accordance with Article 141.

Article 149

Cases that do not proceed to judgment

If the Court declares that the action has become devoid of purpose and that there is no longer any need to adjudicate on it, the Court may at any time of its own motion, on a proposal from the Judge-Rapporteur and after hearing the parties and the Advocate General, decide to rule by reasoned order. It shall give a decision as to costs.

Article 150

Absolute bar to proceeding with a case

On a proposal from the Judge-Rapporteur, the Court may at any time of its own motion, after hearing the parties and the Advocate General, decide to rule by reasoned order on whether there exists any absolute bar to proceeding with a case.

Article 151

Preliminary objections and issues

1. A party applying to the Court for a decision on a preliminary objection or issue not going to the substance of the case shall submit the application by a separate document.

2. The application must state the pleas of law and arguments relied on and the form of order sought by the applicant; any supporting items and documents must be annexed to it.

3. As soon as the application has been submitted, the President shall prescribe a time-limit within which the opposite party may submit in writing his pleas in law and the form of order which he seeks.

4. Unless the Court decides otherwise, the remainder of the proceedings on the application shall be oral.

5. The Court shall, after hearing the Advocate General, decide on the application as soon as possible or, where special circumstances so justify, reserve its decision until it rules on the substance of the case.

6. If the Court refuses the application or reserves its decision, the President shall prescribe new time-limits for the further steps in the proceedings.

Chapter 8

JUDGMENTS BY DEFAULT

Article 152

Judgments by default

1. If a defendant on whom an application initiating proceedings has been duly served fails to respond to the application in the proper form and within the time-limit prescribed, the applicant may apply to the Court for judgment by default.

2. The application for judgment by default shall be served on the defendant. The Court may decide to open the oral part of the procedure on the application.

3. Before giving judgment by default the Court shall, after hearing the Advocate General, consider whether the application initiating proceedings is admissible, whether the appropriate formalities have been complied with, and whether the applicant's claims appear well founded. The Court may adopt measures of organisation of procedure or order measures of inquiry.

4. A judgment by default shall be enforceable. The Court may, however, grant a stay of execution until the Court has given its decision on any application under Article 156 to set aside the judgment, or it may make execution subject to the provision of security of an amount and nature to be fixed in the light of the circumstances; this security shall be released if no such application is made or if the application fails.

Chapter 9

REQUESTS AND APPLICATIONS RELATING TO JUDGMENTS AND ORDERS

Article 153

Competent formation of the Court

1. With the exception of applications referred to in Article 159, the requests and applications referred to in this Chapter shall be assigned to the Judge-Rapporteur who was responsible for the case to which the request or application relates, and shall be assigned to the formation of the Court which gave a decision in that case.

2. If the Judge-Rapporteur is prevented from acting, the President of the Court shall assign the request or application referred to in this Chapter to a Judge who was a member of the formation of the Court which gave a decision in the case to which that request or application relates.

3. If the quorum referred to in Article 17 of the Statute can no longer be attained, the Court shall, on a proposal from the Judge-Rapporteur and after hearing the Advocate General, assign the request or application to a new formation of the Court.

Article 154

Rectification

1. Without prejudice to the provisions relating to the interpretation of judgments and orders, clerical mistakes, errors in calculation and obvious inaccuracies may be rectified by the Court, of its own motion or at the request of a party made within two weeks after delivery of the judgment or service of the order.

2. Where the request for rectification concerns the operative part or one of the grounds constituting the necessary support for the operative part, the parties, whom the Registrar shall duly inform, may submit written observations within a time-limit prescribed by the President.

3. The Court shall take its decision after hearing the Advocate General.

4. The original of the rectification order shall be annexed to the original of the rectified decision. A note of this order shall be made in the margin of the original of the rectified decision.

Article 155

Failure to adjudicate

1. If the Court has failed to adjudicate on a specific head of claim or on costs, any party wishing to rely on that may, within a month after service of the decision, apply to the Court to supplement its decision.

2. The application shall be served on the opposite party and the President shall prescribe a time-limit within which that party may submit written observations.

3. After these observations have been submitted, the Court shall, after hearing the Advocate General, decide both on the admissibility and on the substance of the application.

Article 156

Application to set aside

1. Application may be made pursuant to Article 41 of the Statute to set aside a judgment delivered by default.

2. The application to set aside the judgment must be made within one month from the date of service of the judgment and must be submitted in the form prescribed by Articles 120 to 122 of these Rules.

3. After the application has been served, the President shall prescribe a time-limit within which the other party may submit his written observations.

4. The proceedings shall be conducted in accordance with Articles 59 to 92 of these Rules.

5. The Court shall decide by way of a judgment which may not be set aside.

6. The original of this judgment shall be annexed to the original of the judgment by default. A note of the judgment on the application to set aside shall be made in the margin of the original of the judgment by default.

Article 157

Third-party proceedings

1. Articles 120 to 122 of these Rules shall apply to an application initiating third-party proceedings made pursuant to Article 42 of the Statute. In addition such an application shall:

(a) specify the judgment or order contested;

(b) state how the contested decision is prejudicial to the rights of the third party;

(c) indicate the reasons for which the third party was unable to take part in the original case.

2. The application must be made against all the parties to the original case.

3. The application must be submitted within two months of publication of the decision in the *Official Journal of the European Union*.

4. The Court may, on application by the third party, order a stay of execution of the contested decision. The provisions of Chapter 10 of this Title shall apply.

5. The contested decision shall be varied on the points on which the submissions of the third party are upheld.

6. The original of the judgment in the third-party proceedings shall be annexed to the original of the contested decision. A note of the judgment in the third-party proceedings shall be made in the margin of the original of the contested decision.

Article 158

Interpretation

1. In accordance with Article 43 of the Statute, if the meaning or scope of a judgment or order is in doubt, the Court shall construe it on application by any party or any institution of the European Union establishing an interest therein.

2. An application for interpretation must be made within two years after the date of delivery of the judgment or service of the order.

3. An application for interpretation shall be made in accordance with Articles 120 to 122 of these Rules. In addition it shall specify:

(a) the decision in question;

(b) the passages of which interpretation is sought.

4. The application must be made against all the parties to the case in which the decision of which interpretation is sought was given.

5. The Court shall give its decision after having given the parties an opportunity to submit their observations and after hearing the Advocate General.

6. The original of the interpreting decision shall be annexed to the original of the decision interpreted. A note of the interpreting decision shall be made in the margin of the original of the decision interpreted.

Article 159

Revision

1. In accordance with Article 44 of the Statute, an application for revision of a decision of the Court may be made only on discovery of a fact which is of such a nature as to be a decisive factor and which, when the judgment was delivered or the order served, was unknown to the Court and to the party claiming the revision.

2. Without prejudice to the time-limit of 10 years prescribed in the third paragraph of Article 44 of the Statute, an application for revision shall be made within three months of the date on which the facts on which the application is founded came to the applicant's knowledge.

3. Articles 120 to 122 of these Rules shall apply to an application for revision. In addition such an application shall:

(a) specify the judgment or order contested;

(b) indicate the points on which the decision is contested;

(c) set out the facts on which the application is founded;

(d) indicate the nature of the evidence to show that there are facts justifying revision, and that the time-limits laid down in paragraph 2 have been observed.

4. The application for revision must be made against all parties to the case in which the contested decision was given.

5. Without prejudice to its decision on the substance, the Court shall, after hearing the Advocate General, give in the form of an order its decision on the admissibility of the application, having regard to the written observations of the parties.

6. If the Court declares the application admissible, it shall proceed to consider the substance of the application and shall give its decision in the form of a judgment in accordance with these Rules.

7. The original of the revising judgment shall be annexed to the original of the decision revised. A note of the revising judgment shall be made in the margin of the original of the decision revised.

Chapter 10

SUSPENSION OF OPERATION OR ENFORCEMENT AND OTHER INTERIM MEASURES

Article 160

Application for suspension or for interim measures

1. An application to suspend the operation of any measure adopted by an institution, made pursuant to Article 278 TFEU or Article 157 TEAEC, shall be admissible only if the applicant has challenged that measure in an action before the Court.

2. An application for the adoption of one of the other interim measures referred to in Article 279 TFEU shall be admissible only if it is made by a party to a case before the Court and relates to that case.

3. An application of a kind referred to in the preceding paragraphs shall state the subject-matter of the proceedings, the circumstances giving rise to urgency and the pleas of fact and law establishing a prima facie case for the interim measure applied for.

4. The application shall be made by a separate document and in accordance with the provisions of Articles 120 to 122 of these Rules.

5. The application shall be served on the opposite party, and the President shall prescribe a short time-limit within which that party may submit written or oral observations.

6. The President may order a preparatory inquiry.

7. The President may grant the application even before the observations of the opposite party have been submitted. This decision may be varied or cancelled even without any application being made by any party.

Article 161

Decision on the application

1. The President shall either decide on the application himself or refer it immediately to the Court.

2. If the President is prevented from acting, Articles 10 and 13 of these Rules shall apply.

3. Where the application is referred to it, the Court shall give a decision immediately, after hearing the Advocate General.

Article 162

Order for suspension of operation or for interim measures

1. The decision on the application shall take the form of a reasoned order, from which no appeal shall lie. The order shall be served on the parties forthwith.

2. The execution of the order may be made conditional on the lodging by the applicant of security, of an amount and nature to be fixed in the light of the circumstances.

3. Unless the order fixes the date on which the interim measure is to lapse, the measure shall lapse when the judgment which closes the proceedings is delivered.

4. The order shall have only an interim effect, and shall be without prejudice to the decision of the Court on the substance of the case.

Article 163

Change in circumstances

On application by a party, the order may at any time be varied or cancelled on account of a change in circumstances.

Article 164

New application

Rejection of an application for an interim measure shall not bar the party who made it from making a further application on the basis of new facts.

Article 165

Applications pursuant to Articles 280 TFEU and 299 TFEU and Article 164 TEAEC

1. The provisions of this Chapter shall apply to applications to suspend the enforcement of a decision of the Court or of any measure adopted by the Council, the European Commission or the European Central Bank, submitted pursuant to Articles 280 TFEU and 299 TFEU or Article 164 TEAEC.

2. The order granting the application shall fix, where appropriate, a date on which the interim measure is to lapse.

Article 166

Application pursuant to Article 81 TEAEC

1. An application of a kind referred to in the third and fourth paragraphs of Article 81 TEAEC shall contain:

(a) the names and addresses of the persons or undertakings to be inspected;

(b) an indication of what is to be inspected and of the purpose of the inspection.

2. The President shall give his decision in the form of an order. Article 162 of these Rules shall apply.

3. If the President is prevented from acting, Articles 10 and 13 of these Rules shall apply.

TITLE V

APPEALS AGAINST DECISIONS OF THE GENERAL COURT

Chapter 1

FORM AND CONTENT OF THE APPEAL, AND FORM OF ORDER SOUGHT

Article 167

Lodging of the appeal

1. An appeal shall be brought by lodging an application at the Registry of the Court of Justice or of the General Court.

2. The Registry of the General Court shall forthwith transmit to the Registry of the Court of Justice the file in the case at first instance and, where necessary, the appeal.

Article 168

Content of the appeal

1. An appeal shall contain:

(a) the name and address of the appellant;

(b) a reference to the decision of the General Court appealed against;

(c) the names of the other parties to the relevant case before the General Court;

(d) the pleas in law and legal arguments relied on, and a summary of those pleas in law;

(e) the form of order sought by the appellant.

2. Articles 119, 121 and 122(1) of these Rules shall apply to appeals.

3. The appeal shall state the date on which the decision appealed against was served on the appellant.

4. If an appeal does not comply with paragraphs 1 to 3 of this Article, the Registrar shall prescribe a reasonable time-limit within which the appellant is to put the appeal in order. If the appellant fails to put the appeal in order within the time-limit prescribed, the Court of Justice shall, after hearing the Judge-Rapporteur and the Advocate General, decide whether the non-compliance with that formal requirement renders the appeal formally inadmissible.

Article 169

Form of order sought, pleas in law and arguments of the appeal

1. An appeal shall seek to have set aside, in whole or in part, the decision of the General Court as set out in the operative part of that decision.

2. The pleas in law and legal arguments relied on shall identify precisely those points in the grounds of the decision of the General Court which are contested.

Article 170

Form of order sought in the event that the appeal is allowed

1. An appeal shall seek, in the event that it is declared well founded, the same form of order, in whole or in part, as that sought at first instance and shall not seek a different form of order. The subject-matter of the proceedings before the General Court may not be changed in the appeal.

2. Where the appellant requests that the case be referred back to the General Court if the decision appealed against is set aside, he shall set out the reasons why the state of the proceedings does not permit a decision by the Court of Justice.

Chapter 2

RESPONSES, REPLIES AND REJOINDERS

Article 171

Service of the appeal

1. The appeal shall be served on the other parties to the relevant case before the General Court.

2. In a case where Article 168(4) of these Rules applies, service shall be effected as soon as the appeal has been put in order or the Court of Justice has declared it admissible notwithstanding the failure to observe the formal requirements laid down by that Article.

Article 172

Parties authorised to lodge a response

Any party to the relevant case before the General Court having an interest in the appeal being allowed or dismissed may submit a response within two months after service on him of the appeal. The time-limit for submitting a response shall not be extended.

Article 173

Content of the response

1. A response shall contain:

(a) the name and address of the party submitting it;

(b) the date on which the appeal was served on him;

(c) the pleas in law and legal arguments relied on;

(d) the form of order sought.

2. Articles 119 and 121 of these Rules shall apply to responses.

Article 174

Form of order sought in the response

A response shall seek to have the appeal allowed or dismissed, in whole or in part.

Article 175

Reply and rejoinder

1. The appeal and the response may be supplemented by a reply and a rejoinder only where the President, on a duly reasoned application submitted by the appellant within seven days of service of the response, considers it necessary, after hearing the Judge-Rapporteur and the Advocate General, in particular to enable the appellant to present his views on a plea of inadmissibility or on new matters relied on in the response.

2. The President shall fix the date by which the reply is to be produced and, upon service of that pleading, the date by which the rejoinder is to be produced. He may limit the number of pages and the subject-matter of those pleadings.

Chapter 3

FORM AND CONTENT OF THE CROSS-APPEAL, AND FORM OF ORDER SOUGHT

Article 176

Cross-appeal

1. The parties referred to in Article 172 of these Rules may submit a cross-appeal within the same time-limit as that prescribed for the submission of a response.

2. A cross-appeal must be introduced by a document separate from the response.

Article 177

Content of the cross-appeal

1. A cross-appeal shall contain:

(a) the name and address of the party bringing the cross-appeal;

(b) the date on which the appeal was served on him;

(c) the pleas in law and legal arguments relied on;

(d) the form of order sought.

2. Articles 119, 121 and 122(1) and (3) of these Rules shall apply to cross-appeals.

Article 178

Form of order sought, pleas in law and arguments of the cross-appeal

1. A cross-appeal shall seek to have set aside, in whole or in part, the decision of the General Court.

2. It may also seek to have set aside an express or implied decision relating to the admissibility of the action before the General Court.

3. The pleas in law and legal arguments relied on shall identify precisely those points in the grounds of the decision of the General Court which are contested. The pleas in law and arguments must be separate from those relied on in the response.

Chapter 4

PLEADINGS CONSEQUENT ON THE CROSS-APPEAL

Article 179

Response to the cross-appeal

Where a cross-appeal is brought, the applicant at first instance or any other party to the relevant case before the General Court having an interest in the cross-appeal being allowed or dismissed may submit a response, which must be limited to the pleas in law relied on in that cross-appeal, within two months after its being served on him. That time-limit shall not be extended.

Article 180

Reply and rejoinder on a cross-appeal

1. The cross-appeal and the response thereto may be supplemented by a reply and a rejoinder only where the President, on a duly reasoned application submitted by the party who brought the cross-appeal within seven days of service of the response to the cross-appeal, considers it necessary, after hearing the Judge-Rapporteur and the Advocate General, in particular to enable that party to present his views on a plea of inadmissibility or on new matters relied on in the response to the cross-appeal.

2. The President shall fix the date by which that reply is to be produced and, upon service of that pleading, the date by which the rejoinder is to be produced. He may limit the number of pages and the subject-matter of those pleadings.

Chapter 5

APPEALS DETERMINED BY ORDER

Article 181

Manifestly inadmissible or manifestly unfounded appeal or cross-appeal

Where the appeal or cross-appeal is, in whole or in part, manifestly inadmissible or manifestly unfounded, the Court may at any time, acting on a proposal from the Judge-Rapporteur and after hearing the Advocate General, decide by reasoned order to dismiss that appeal or cross-appeal in whole or in part.

Article 182

Manifestly well-founded appeal or cross-appeal

Where the Court has already ruled on one or more questions of law identical to those raised by the pleas in law of the appeal or cross-appeal and considers the appeal or cross-appeal to be manifestly well founded, it may, acting on a proposal from the Judge-Rapporteur and after hearing the parties and the Advocate General, decide by reasoned order in which reference is made to the relevant case-law to declare the appeal or cross-appeal manifestly well founded.

Chapter 6

EFFECT ON A CROSS-APPEAL OF THE REMOVAL OF THE APPEAL FROM THE REGISTER

Article 183

Effect on a cross-appeal of the discontinuance or manifest inadmissibility of the appeal

A cross-appeal shall be deemed to be devoid of purpose:

(a) if the appellant discontinues his appeal;

(b) if the appeal is declared manifestly inadmissible for non-compliance with the time-limit for lodging an appeal;

(c) if the appeal is declared manifestly inadmissible on the sole ground that it is not directed against a final decision of the General Court or against a decision disposing of the substantive issues in part only or disposing of a procedural issue concerning a plea of lack of competence or inadmissibility within the meaning of the first paragraph of Article 56 of the Statute.

Chapter 7

COSTS AND LEGAL AID IN APPEALS

Article 184

Costs in appeals

1. Subject to the following provisions, Articles 137 to 146 of these Rules shall apply, *mutatis mutandis*, to the procedure before the Court of Justice on an appeal against a decision of the General Court.

2. Where the appeal is unfounded or where the appeal is well founded and the Court itself gives final judgment in the case, the Court shall make a decision as to the costs.

3. When an appeal brought by a Member State or an institution of the European Union which did not intervene in the proceedings before the General Court is well founded, the Court of Justice may order that the parties share the costs or that the successful appellant pay the costs which the appeal has caused an unsuccessful party to incur.

4. Where the appeal has not been brought by an intervener at first instance, he may not be ordered to pay costs in the appeal proceedings unless he participated in the written or oral part of the proceedings before the Court of Justice. Where an intervener at first instance takes part in the proceedings, the Court may decide that he shall bear his own costs.

Article 185

Legal aid

1. A party who is wholly or in part unable to meet the costs of the proceedings may at any time apply for legal aid.

2. The application shall be accompanied by all information and supporting documents making it possible to assess the applicant's financial situation, such as a certificate issued by a competent national authority attesting to his financial situation.

Article 186

Prior application for legal aid

1. If the application is made prior to the appeal which the applicant for legal aid intends to commence, it shall briefly state the subject of the appeal.

2. The application for legal aid need not be made through a lawyer.

3. The introduction of an application for legal aid shall, with regard to the person who made that application, suspend the time-limit prescribed for the bringing of the appeal until the date of service of the order making a decision on that application.

4. The President shall assign the application for legal aid, as soon as it is lodged, to a Judge-Rapporteur who shall put forward, promptly, a proposal as to the action to be taken on it.

Article 187

Decision on the application for legal aid

1. The decision to grant legal aid, in whole or in part, or to refuse it shall be taken, on a proposal from the Judge-Rapporteur and after hearing the Advocate General, by the Chamber of three Judges to which the Judge-Rapporteur is assigned. In that event, the formation of the Court shall be composed of the President of that Chamber, the Judge-Rapporteur and the first Judge or, as the case may be, the first two Judges designated from the list referred to in Article 28(3) on the date on which the application for legal aid is brought before that Chamber by the Judge-Rapporteur. It shall consider, if appropriate, whether the appeal is manifestly unfounded.

2. If the Judge-Rapporteur is not a member of a Chamber of three Judges, the decision shall be taken, under the same conditions, by the Chamber of five Judges to which he is assigned. In addition to the Judge-Rapporteur, the formation of the Court shall be composed of four Judges designated from the list referred to in Article 28(2) on the date on which the application for legal aid is brought before that Chamber by the Judge-Rapporteur.

3. The formation of the Court shall give its decision by way of order. Where the application for legal aid is refused in whole or in part, the order shall state the reasons for that refusal.

Article 188

Sums to be advanced as legal aid

1. Where legal aid is granted, the cashier of the Court shall be responsible, where applicable within the limits set by the formation of the Court, for costs involved in the assistance and representation of the applicant before the Court. At the request of the applicant or his representative, an advance on those costs may be paid.

2. In its decision as to costs the Court may order the payment to the cashier of the Court of sums advanced as legal aid.

3. The Registrar shall take steps to obtain the recovery of these sums from the party ordered to pay them.

Article 189

Withdrawal of legal aid

The formation of the Court which gave a decision on the application for legal aid may at any time, either of its own motion or on request, withdraw that legal aid if the circumstances which led to its being granted alter during the proceedings.

Chapter 8

OTHER PROVISIONS APPLICABLE TO APPEALS

Article 190

Other provisions applicable to appeals

1. Articles 127, 129 to 136, 147 to 150, 153 to 155 and 157 to 166 of these Rules shall apply to the procedure before the Court of Justice on an appeal against decisions of the General Court.

2. By way of derogation from Article 130(1), an application to intervene shall, however, be made within one month of the publication of the notice referred to in Article 21(4).

3. Article 95 shall apply, *mutatis mutandis*, to the procedure before the Court of Justice on an appeal against decisions of the General Court.

TITLE VI

REVIEW OF DECISIONS OF THE GENERAL COURT

Article 191

Reviewing Chamber

A Chamber of five Judges shall be designated for a period of one year for the purpose of deciding, in accordance with Articles 193 and 194 of these Rules, whether a decision of the General Court is to be reviewed in accordance with Article 62 of the Statute.

Article 192

Information and communication of decisions which may be reviewed

1. As soon as the date for the delivery or signature of a decision to be given under Article 256(2) or (3) TFEU is fixed, the Registry of the General Court shall inform the Registry of the Court of Justice.

2. The decision shall be communicated to the Registry of the Court of Justice immediately upon its delivery or signature, as shall the file in the case, which shall be made available forthwith to the First Advocate General.

Article 193

Review of decisions given on appeal

1. The proposal of the First Advocate General to review a decision of the General Court given under Article 256(2) TFEU shall be forwarded to the President of the Court of Justice and to the President of the reviewing Chamber. Notice of that transmission shall be given to the Registrar at the same time.

2. As soon as he is informed of the existence of a proposal, the Registrar shall communicate the file in the case before the General Court to the members of the reviewing Chamber.

3. As soon as the proposal to review has been received, the President of the Court shall designate the Judge-Rapporteur from among the Judges of the reviewing Chamber on a proposal from the President of that Chamber. The composition of the formation of the Court shall be determined in accordance with Article 28(2) of these Rules on the day on which the case is assigned to the Judge-Rapporteur.

4. That Chamber, acting on a proposal from the Judge-Rapporteur, shall decide whether the decision of the General Court is to be reviewed. The decision to review the decision of the General Court shall indicate only the questions which are to be reviewed.

5. The General Court, the parties to the proceedings before it and the other interested persons referred to in the second paragraph of Article 62a of the Statute shall forthwith be informed by the Registrar of the decision of the Court of Justice to review the decision of the General Court.

6. Notice of the date of the decision to review the decision of the General Court and of the questions which are to be reviewed shall be published in the *Official Journal of the European Union*.

Article 194

Review of preliminary rulings

1. The proposal of the First Advocate General to review a decision of the General Court given under Article 256(3) TFEU shall be forwarded to the President of the Court of Justice and to the President of the reviewing Chamber. Notice of that transmission shall be given to the Registrar at the same time.

2. As soon as he is informed of the existence of a proposal, the Registrar shall communicate the file in the case before the General Court to the members of the reviewing Chamber.

3. The Registrar shall also inform the General Court, the referring court or tribunal, the parties to the main proceedings and the other interested persons referred to in the second paragraph of Article 62a of the Statute of the existence of a proposal to review.

4. As soon as the proposal to review has been received, the President of the Court shall designate the Judge-Rapporteur from among the Judges of the reviewing Chamber on a proposal from the President of that Chamber. The composition of the formation of the Court shall be determined in accordance with Article 28(2) of these Rules on the day on which the case is assigned to the Judge-Rapporteur.

5. That Chamber, acting on a proposal from the Judge-Rapporteur, shall decide whether the decision of the General Court is to be reviewed. The decision to review the decision of the General Court shall indicate only the questions which are to be reviewed.

6. The General Court, the referring court or tribunal, the parties to the main proceedings and the other interested persons referred to in the second paragraph of Article 62a of the Statute shall forthwith be informed by the Registrar of the decision of the Court of Justice as to whether or not the decision of the General Court is to be reviewed.

7. Notice of the date of the decision to review the decision of the General Court and of the questions which are to be reviewed shall be published in the *Official Journal of the European Union*.

Article 195

Judgment on the substance of the case after a decision to review

1. The decision to review a decision of the General Court shall be served on the parties and other interested persons referred to in the second paragraph of Article 62a of the Statute. The decision served on the Member States, and the States, other than the Member States, which are parties to the EEA Agreement, as well as the EFTA Surveillance Authority, shall be accompanied by a translation of the decision of the Court of Justice in accordance with the provisions of Article 98 of these Rules. The decision of the Court of Justice shall also be communicated to the General Court and, if applicable, to the referring court or tribunal.

2. Within one month of the date of service referred to in paragraph 1, the parties and other interested persons on whom the decision of the Court of Justice has been served may lodge statements or written observations on the questions which are subject to review.

3. As soon as a decision to review a decision of the General Court has been taken, the First Advocate General shall assign the review to an Advocate General.

4. The reviewing Chamber shall rule on the substance of the case, after hearing the Advocate General.

5. It may, however, request the Court of Justice to assign the case to a formation of the Court composed of a greater number of Judges.

6. Where the decision of the General Court which is subject to review was given under Article 256(2) TFEU, the Court of Justice shall make a decision as to costs.

TITLE VII

OPINIONS

Article 196

Written part of the procedure

1. In accordance with Article 218(11) TFEU, a request for an Opinion may be made by a Member State, by the European Parliament, by the Council or by the European Commission.

2. A request for an Opinion may relate both to whether the envisaged agreement is compatible with the provisions of the Treaties and to whether the European Union or any institution of the European Union has the power to enter into that agreement.

3. It shall be served on the Member States and on the institutions referred to in paragraph 1, and the President shall prescribe a time-limit within which they may submit written observations.

Article 197

Designation of the Judge-Rapporteur and of the Advocate General

As soon as the request for an Opinion has been submitted, the President shall designate a Judge-Rapporteur and the First Advocate General shall assign the case to an Advocate General.

Article 198

Hearing

The Court may decide that the procedure before it shall also include a hearing.

Article 199

Time-limit for delivering the Opinion

The Court shall deliver its Opinion as soon as possible, after hearing the Advocate General.

Article 200

Delivery of the Opinion

The Opinion, signed by the President, the Judges who took part in the deliberations and the Registrar, shall be delivered in open court. It shall be served on all the Member States and on the institutions referred to in Article 196(1).

TITLE VIII

PARTICULAR FORMS OF PROCEDURE

Article 201

Appeals against decisions of the arbitration committee

1. An application initiating an appeal under the second paragraph of Article 18 TEAEC shall state:

(a) the name and permanent address of the applicant;

(b) the description of the signatory;

(c) a reference to the arbitration committee's decision against which the appeal is made;

(d) the names of the respondents;

(e) a summary of the facts;

(f) the grounds on which the appeal is based and arguments relied on, and a brief statement of those grounds;

(g) the form of order sought by the applicant.

2. Articles 119 and 121 of these Rules shall apply to the application.

3. A certified copy of the contested decision shall be annexed to the application.

4. As soon as the application has been lodged, the Registrar of the Court shall request the arbitration committee registry to transmit to the Court the file in the case.

5. Articles 123 and 124 of these Rules shall apply to this procedure. The Court may decide that the procedure before it shall also include a hearing.

6. The Court shall give its decision in the form of a judgment. Where the Court sets aside the decision of the arbitration committee it may refer the case back to the committee.

Article 202

Procedure under Article 103 TEAEC

1. Four certified copies shall be lodged of an application under the third paragraph of Article 103 TEAEC. The application shall be accompanied by the draft of the agreement or contract concerned, by the observations of the European Commission addressed to the State concerned and by all other supporting documents.

2. The application and annexes thereto shall be served on the European Commission, which shall have a time-limit of 10 days from such service to submit its written observations. This time-limit may be extended by the President after the State concerned has been heard.

3. Following the lodging of such observations, which shall be served on the State concerned, the Court shall give its decision promptly, after hearing the Advocate General and, if they so request, the State concerned and the European Commission.

Article 203

Procedures under Articles 104 TEAEC and 105 TEAEC

Applications under the third paragraph of Article 104 TEAEC and the second paragraph of Article 105 TEAEC shall be governed by the provisions of Titles II and IV of these Rules. Such applications shall also be served on the State to which the respondent person or undertaking belongs.

Article 204

Procedure provided for by Article 111(3) of the EEA Agreement

1. In the case governed by Article 111(3) of the EEA Agreement, the matter shall be brought before the Court by a request submitted by the Contracting Parties which are parties to the dispute. The request shall be served on the other Contracting Parties, on the European Commission, on the EFTA Surveillance Authority and, where appropriate, on the other interested persons on whom a request for a preliminary ruling raising the same question of interpretation of European Union legislation would be served.

2. The President shall prescribe a time-limit within which the Contracting Parties and the other interested persons on whom the request has been served may submit written observations.

3. The request shall be made in one of the languages referred to in Article 36 of these Rules. Article 38 shall apply. The provisions of Article 98 shall apply *mutatis mutandis*.

4. As soon as the request referred to in paragraph 1 of this Article has been submitted, the President shall designate a Judge-Rapporteur. The First Advocate General shall, immediately afterwards, assign the request to an Advocate General.

5. The Court shall, after hearing the Advocate General, give a reasoned decision on the request.

6. The decision of the Court, signed by the President, the Judges who took part in the deliberations and the Registrar, shall be served on the Contracting Parties and on the other interested persons referred to in paragraphs 1 and 2.

Article 205

Settlement of the disputes referred to in Article 35 TEU in the version in force before the entry into force of the Treaty of Lisbon

1. In the case of disputes between Member States as referred to in Article 35(7) TEU in the version in force before the entry into force of the Treaty of Lisbon, as maintained in force by Protocol No 36 annexed to the Treaties, the matter shall be brought before the Court by an application by a party to the dispute. The application shall be served on the other Member States and on the European Commission.

2. In the case of disputes between Member States and the European Commission as referred to in Article 35(7) TEU in the version in force before the entry into force of the Treaty of Lisbon, as maintained in force by Protocol No 36 annexed to the Treaties, the matter shall be brought before the Court by an application by a party to the dispute. The application shall be served on the other Member States, the Council and the European Commission if it was submitted by a Member State. The application shall be served on the Member States and on the Council if it was submitted by the European Commission.

3. The President shall prescribe a time-limit within which the institutions and the Member States on which the application has been served may submit written observations.

4. As soon as the application referred to in paragraphs 1 and 2 has been submitted, the President shall designate a Judge-Rapporteur. The First Advocate General shall, immediately afterwards, assign the application to an Advocate General.

5. The Court may decide that the procedure before it shall also include a hearing.

6. The Court shall, after the Advocate General has delivered his Opinion, give its ruling on the dispute by way of judgment.

7. The same procedure as that laid down in the preceding paragraphs shall apply where an agreement concluded between the Member States confers jurisdiction on the Court to rule on a dispute between Member States or between Member States and an institution.

Article 206

Requests under Article 269 TFEU

1. Four certified copies shall be submitted of a request under Article 269 TFEU. The request shall be accompanied by any relevant document and, in particular, any observations and recommendations made pursuant to Article 7 TEU.

2. The request and annexes thereto shall be served on the European Council or on the Council, as appropriate, each of which shall have a time-limit of 10 days from such service to submit its written observations. This time-limit shall not be extended.

3. The request and annexes thereto shall also be communicated to the Member States other than the State in question, to the European Parliament and to the European Commission.

4. Following the lodging of the observations referred to in paragraph 2, which shall be served on the Member State concerned and on the States and institutions referred to in paragraph 3, the Court shall give its decision within a time-limit of one month from the lodging of the request and after hearing the Advocate General. At the request of the Member State concerned, the European Council or the Council, or of its own motion, the Court may decide that the procedure before it shall also include a hearing, which all the States and institutions referred to in this Article shall be given notice to attend.

FINAL PROVISIONS

Article 207

Supplementary rules

Subject to the provisions of Article 253 TFEU and after consultation with the Governments concerned, the Court shall adopt supplementary rules concerning its practice in relation to:

(a) letters rogatory;

(b) applications for legal aid;

(c) reports by the Court of perjury by witnesses or experts, delivered pursuant to Article 30 of the Statute.

Article 208

Implementing rules

The Court may, by a separate act, adopt practice rules for the implementation of these Rules.

Article 209

Repeal

These Rules replace the Rules of Procedure of the Court of Justice of the European Communities adopted on 19 June 1991, as last amended on 24 May 2011 (*Official Journal of the European Union*, L 162 of 22 June 2011, p. 17).

Article 210

Publication and entry into force of these Rules

These Rules, which are authentic in the languages referred to in Article 36 of these Rules, shall be published in the *Official Journal of the European Union* and shall enter into force on the first day of the second month following their publication.

Done at Luxembourg, 25 September 2012.

I

(Resolutions, recommendations and opinions)

RECOMMENDATIONS

COURT OF JUSTICE OF THE EUROPEAN UNION

These recommendations follow on from the adoption on 25 September 2012 in Luxembourg of the new Rules of Procedure of the Court of Justice (OJ L 265, 29.9.2012, p. 1). They replace the information note on references from national courts for a preliminary ruling (OJ C 160, 28.5.2011, p. 1) and reflect innovations introduced by those Rules which may affect both the principle of a reference for a preliminary ruling to the Court of Justice and the procedure for making such a reference.

RECOMMENDATIONS

to national courts and tribunals in relation to the initiation of preliminary ruling proceedings

(2012/C 338/01)

I — GENERAL PROVISIONS

The Court's jurisdiction in preliminary rulings

1. The reference for a preliminary ruling is a fundamental mechanism of European Union law aimed at enabling the courts and tribunals of the Member States to ensure uniform interpretation and application of that law within the European Union.

2. Under Article 19(3)(b) of the Treaty on European Union ('TEU') and Article 267 of the Treaty on the Functioning of the European Union ('TFEU'), the Court of Justice of the European Union has jurisdiction to give preliminary rulings on the interpretation of Union law and on the validity of acts adopted by the institutions, bodies, offices or agencies of the Union.

3. Article 256(3) TFEU provides that the General Court is to have jurisdiction to hear and determine questions referred for a preliminary ruling under Article 267 TFEU, in specific areas laid down by the Statute. However, since no provisions have been introduced into the Statute in that regard, the Court of Justice alone currently has jurisdiction to give preliminary rulings.

4. While Article 267 TFEU confers on the Court of Justice a general jurisdiction in that regard, a number of primary law provisions exist which lay down exceptions to or temporary restrictions on that jurisdiction. This is true, in particular, of Articles 275 TFEU and 276 TFEU and Article 10 of Protocol (No 36) on Transitional Provisions of the Treaty of Lisbon (OJEU 2010 C 83, p. 1) ([1]).

([1]) Article 10(1) to (3) of Protocol No 36 provides that the powers of the Court of Justice in relation to acts of the Union adopted in the field of police cooperation and judicial cooperation in criminal matters before the entry into force of the Treaty of Lisbon, and which have not since been amended, are to remain the same for a maximum period of five years from the date of entry into force of the Treaty of Lisbon (1 December 2009). During that period, such acts may, therefore, form the subject-matter of a reference for a preliminary ruling only where the order for reference is made by a court or tribunal of a Member State which has accepted the jurisdiction of the Court of Justice, it being a matter for each of those States to determine whether the right to refer a question to the Court is to be available to all of its national courts and tribunals or is to be reserved to the courts or tribunals of last instance.

5. Since the preliminary ruling procedure is based on cooperation between the Court of Justice and the courts and tribunals of the Member States, it may be helpful, in order to ensure that that procedure is fully effective, to provide those courts and tribunals with the following recommendations.

6. While in no way binding, these recommendations are intended to supplement Title III of the Rules of Procedure of the Court of Justice (Articles 93 to 118) and to provide guidance to the courts and tribunals of the Member States as to whether it is appropriate to make a reference for a preliminary ruling, as well as practical information concerning the form and effect of such a reference.

The role of the Court of Justice in the preliminary ruling procedure

7. As stated above, under the preliminary ruling procedure the Court's role is to give an interpretation of European Union law or to rule on its validity, not to apply that law to the factual situation underlying the main proceedings. That is the task of the national court or tribunal and it is not, therefore, for the Court either to decide issues of fact raised in the main proceedings or to resolve any differences of opinion on the interpretation or application of rules of national law.

8. When ruling on the interpretation or validity of European Union law, the Court makes every effort to give a reply which will be of assistance in resolving the dispute in the main proceedings, but it is for the referring court or tribunal to draw specific conclusions from that reply, if necessary by disapplying the rule of national law in question.

The decision to make a reference for a preliminary ruling

The originator of the request for a preliminary ruling

9. Under Article 267 TFEU, any court or tribunal of a Member State, in so far as it is called upon to give a ruling in proceedings intended to arrive at a decision of a judicial nature, may as a rule submit a request for a preliminary ruling to the Court of Justice. Status as a court or tribunal is interpreted by the Court of Justice as a self-standing concept of European Union law, the Court taking account of a number of factors such as whether the body making the reference is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is *inter partes*, whether it applies rules of law and whether it is independent.

10. Whether or not the parties to the main proceedings have expressed the wish that it do so, it is for the national court or tribunal alone to decide whether to refer a question to the Court of Justice for a preliminary ruling.

References on interpretation

11. Article 267 TFEU provides that any court or tribunal may submit a request for a preliminary ruling to the Court of Justice on the interpretation of a rule of European Union law if it considers it necessary to do so in order to resolve the dispute brought before it.

12. However, courts or tribunals against whose decisions there is no judicial remedy under national law must bring such a request before the Court, unless the Court has already ruled on the point (and there is no new context that raises any serious doubt as to whether that case-law may be applied in that instance), or unless the correct interpretation of the rule of law in question is obvious.

13. Thus, a national court or tribunal may, in particular when it considers that sufficient guidance is given by the case-law of the Court of Justice, itself decide on the correct interpretation of European Union law and its application to the factual situation before it. However, a reference for a preliminary ruling may prove particularly useful when there is a new question of interpretation of general interest for the uniform application of European Union law, or where the existing case-law does not appear to be applicable to a new set of facts.

14. In order to enable the Court of Justice properly to identify the subject-matter of the main proceedings and the questions that arise, it is helpful if, in respect of each question referred, the national court or tribunal explains why the interpretation sought is necessary to enable it to give judgment.

References on determination of validity

15. Although the courts and tribunals of the Member States may reject pleas raised before them challenging the validity of acts of an institution, body, office or agency of the Union, the Court of Justice has exclusive jurisdiction to declare such an act invalid.

16. All national courts or tribunals **must** therefore submit a request for a preliminary ruling to the Court when they have doubts about the validity of such an act, stating the reasons for which they consider that the act may be invalid.

17. However, if a national court or tribunal has serious doubts about the validity of an act of an institution, body, office or agency of the Union on which a national measure is based, it may exceptionally suspend application of that measure temporarily or grant other interim relief with respect to it. It must then refer the question of validity to the Court of Justice, stating the reasons for which it considers the act to be invalid.

The appropriate stage at which to make a reference for a preliminary ruling

18. A national court or tribunal may submit a request for a preliminary ruling to the Court as soon as it finds that a ruling on the interpretation or validity of European Union law is necessary to enable it to give judgment. It is that court or tribunal which is in fact in the best position to decide at what stage of the proceedings such a request should be made.

19. It is, however, desirable that a decision to make a reference for a preliminary ruling should be taken when the national proceedings have reached a stage at which the referring court or tribunal is able to define the legal and factual context of the case, so that the Court of Justice has available to it all the information necessary to check, where appropriate, that European Union law applies to the main proceedings. In the interests of the proper administration of justice, it may also be desirable for the reference to be made only after both sides have been heard.

The form and content of the request for a preliminary ruling

20. The decision by which a court or tribunal of a Member State refers one or more questions to the Court of Justice for a preliminary ruling may be in any form allowed by national law as regards procedural steps. However, it must be borne in mind that it is that document which will serve as the basis of the proceedings before the Court and that it must therefore contain such information as will enable the Court to give a reply which is of assistance to the referring court or tribunal. Moreover, it is only the request for a preliminary ruling which is notified to the parties to the main proceedings and to the other interested persons referred to in Article 23 of the Statute, including the Member States, in order to obtain any written observations.

21. Owing to the need to translate it into all the official languages of the European Union, the request for a preliminary ruling should therefore be drafted simply, clearly and precisely, avoiding superfluous detail.

22. About 10 pages is often sufficient to set out in a proper manner the context of a request for a preliminary ruling. That request must be succinct but sufficiently complete and must contain all the relevant information to give the Court and the interested persons entitled to submit observations a clear understanding of the factual and legal context of the main proceedings. In accordance with Article 94 of the Rules of Procedure, the request for a preliminary ruling must contain, in addition to the text of the questions referred to the Court for a preliminary ruling:

— a summary of the subject-matter of the dispute and the relevant findings of fact as determined by the referring court or tribunal, or, at least, an account of the facts on which the questions referred are based;

— the tenor of any national provisions applicable in the case and, where appropriate, the relevant national case-law ([1]);

([1]) The referring court or tribunal is requested to provide precise references for those texts and their publication, such as a page of an official journal or a specific law report, or a reference to an internet site.

— a statement of the reasons which prompted the referring court or tribunal to inquire about the interpretation or validity of certain provisions of European Union law, and the relationship between those provisions and the national legislation applicable to the main proceedings.

23. The European Union law provisions relevant to the case should be identified as accurately as possible in the request for a preliminary ruling, which should include, if need be, a brief summary of the relevant arguments of the parties to the main proceedings.

24. If it considers itself able to do so, the referring court or tribunal may, finally, briefly state its view on the answer to be given to the questions referred for a preliminary ruling. That information may be useful to the Court, particularly where it is called upon to give a preliminary ruling in an expedited or urgent procedure.

25. In order to make the request for a preliminary ruling easier to read, it is essential that the Court receive it in typewritten form. To enable the Court to refer to the request it is also very helpful if the pages and paragraphs of the order for reference – which must be dated and signed – are numbered.

26. The questions themselves should appear in a separate and clearly identified section of the order for reference, preferably at the beginning or the end. It must be possible to understand them on their own terms, without referring to the statement of the grounds for the request, which will however provide the necessary background for a proper understanding of the implications of the case.

27. Under the preliminary ruling procedure, the Court will, as a rule, use the information contained in the order for reference, including nominative or personal data. It is therefore for the referring court or tribunal itself, if it considers it necessary, to delete certain details in its request for a preliminary ruling or to render anonymous one or more persons or entities concerned by the dispute in the main proceedings.

28. After the request for a preliminary ruling has been lodged, the Court may also render such persons or entities anonymous of its own motion, or at the request of the referring court or tribunal or of a party to the main proceedings. In order to maintain its effectiveness, such a request for anonymity must, however, be made at the earliest possible stage of the proceedings, and in any event prior to publication in the *Official Journal of the European Union* of the notice relating to the case concerned, and to service of the request for a preliminary ruling on the interested persons referred to in Article 23 of the Statute.

The effects of the reference for a preliminary ruling on the national proceedings

29. Although the national court or tribunal may still order protective measures, particularly in connection with a reference on determination of validity (see point 17 above), the lodging of a request for a preliminary ruling nevertheless calls for the national proceedings to be stayed until the Court of Justice has given its ruling.

30. In the interests of the proper conduct of the preliminary ruling proceedings before the Court and in order to maintain their effectiveness, it is incumbent on the referring court or tribunal to inform the Court of Justice of any procedural step that may affect the referral and, in particular, if any new parties are admitted to the national proceedings.

Costs and legal aid

31. Preliminary ruling proceedings before the Court of Justice are free of charge and the Court does not rule on the costs of the parties to the proceedings pending before the referring court or tribunal; it is for the referring court or tribunal to rule on those costs.

32. If a party to the main proceedings has insufficient means and where it is possible under national rules, the referring court or tribunal may grant that party legal aid to cover the costs, including those of lawyers' fees, which it incurs before the Court. The Court itself may also grant legal aid where the party in question is not already in receipt of aid under national rules or to the extent to which that aid does not cover, or covers only partly, costs incurred before the Court.

Communication between the Court of Justice and the national courts and tribunals

33. The request for a preliminary ruling and the relevant documents (including, where applicable, the case file or a copy of it) are to be sent by the national court or tribunal making the reference directly to the Court of Justice. They must be sent by registered post to the Registry of the Court of Justice (Rue du Fort Niedergrünewald, L-2925 Luxembourg).

34. Until the decision containing the Court's ruling on the referring court's or tribunal's request for a preliminary ruling is served on that court or tribunal, the Court Registry will stay in contact with the referring court or tribunal, and will send it copies of the procedural documents.

35. The Court of Justice will send its ruling to the referring court or tribunal. It would welcome information from that court or tribunal on the action taken upon its ruling in the main proceedings, and communication of the referring court's or tribunal's final decision.

II — **SPECIAL PROVISIONS IN RELATION TO URGENT REFERENCES FOR A PRELIMINARY RULING**

36. As provided in Article 23a of the Statute and Articles 105 to 114 of the Rules of Procedure, a reference for a preliminary ruling may, in certain circumstances, be determined pursuant to an expedited procedure or an urgent procedure.

Conditions for the application of the expedited and urgent procedures

37. The Court of Justice decides whether these procedures are to be applied. Such a decision is generally taken only on a reasoned request from the referring court or tribunal. Exceptionally, the Court may, however, decide of its own motion to determine a reference for a preliminary ruling under an expedited procedure or an urgent procedure where that appears to be required by the nature or the particular circumstances of the case.

38. Article 105 of the Rules of Procedure provides that a reference for a preliminary ruling may be determined pursuant to an **expedited procedure** derogating from the provisions of those Rules, where the nature of the case requires that it be dealt with within a short time. Since that procedure imposes significant constraints on all those involved in it, and, in particular, on all the Member States called upon to lodge their observations, whether written or oral, within much shorter time-limits than would ordinarily apply, its application should be sought only in particular circumstances that warrant the Court giving its ruling quickly on the questions referred. The large number of persons or legal situations potentially affected by the decision that the referring court or tribunal has to deliver after bringing a matter before the Court for a preliminary ruling does not, in itself, constitute an exceptional circumstance that would justify the use of the expedited procedure ([1]).

39. The same applies *a fortiori* to the **urgent preliminary ruling procedure**, provided for in Article 107 of the Rules of Procedure. That procedure, which applies only in the areas covered by Title V of Part Three of the TFEU, relating to the area of freedom, security and justice, imposes even greater constraints on those concerned, since it limits in particular the number of parties authorised to lodge written observations and, in cases of extreme urgency, allows the written part of the procedure before the Court to be omitted altogether. The application of the urgent procedure should therefore be requested only where it is absolutely necessary for the Court to give its ruling very quickly on the questions submitted by the referring court or tribunal.

40. Although it is not possible to provide an exhaustive list of such circumstances, particularly because of the varied and evolving nature of the rules of European Union law governing the area of freedom, security and justice, a national court or tribunal might, for example, consider submitting a request for the urgent preliminary ruling procedure to be applied in the case, referred to in the fourth paragraph of Article 267 TFEU, of a person in custody or deprived of his liberty, where the answer to the question raised is decisive as to the assessment of that person's legal situation, or in proceedings concerning parental authority or custody of children, where the identity of the court having jurisdiction under European Union law depends on the answer to the question referred for a preliminary ruling.

([1]) For an insight into circumstances that have resulted in the approval or refusal of requests for the application of the accelerated procedure, made on the basis of Article 104a of the Rules of Procedure of the Court of Justice of 19 June 1991, as amended, see the orders made by the President of the Court of Justice, available at www.curia.europa.eu (the orders can be found under 'Case-law', by selecting each of the following in turn in the search form: Documents – Documents not published in the ECR – Orders – Expedited procedure).

The request for application of the expedited procedure or the urgent procedure

41. To enable the Court to decide quickly whether the expedited procedure or the urgent preliminary ruling procedure should be applied, the request must set out precisely the matters of fact and law which establish the urgency and, in particular, the risks involved in following the ordinary procedure.

42. In so far as it is able to do so, the referring court should briefly state its view on the answer to be given to the questions referred. Such a statement makes it easier for the parties to the main proceedings and the other interested persons participating in the procedure to define their positions and facilitates the Court's decision, thereby contributing to the rapidity of the procedure.

43. The request for the application of the expedited procedure or the urgent procedure must be submitted in an unambiguous form that enables the Court Registry to establish immediately that the file has to be dealt with in a particular way. Accordingly, the referring court or tribunal is asked to specify which of the two procedures is required in that particular case, and to mention in its request the relevant article of the Rules of Procedure (Article 105 for the expedited procedure or Article 107 for the urgent procedure). That mention must be included in a clearly identifiable place in its order for reference (for example, at the head of the page or in a separate judicial document). Where appropriate, a covering letter from the referring court or tribunal can usefully refer to that request.

44. As regards the order for reference itself, it is particularly important that it should be succinct where the matter is urgent, as this will help to ensure the rapidity of the procedure.

Communication between the Court of Justice, the referring court or tribunal and the parties to the main proceedings

45. In order to expedite and facilitate communication with the referring court or tribunal and the parties before it, a court or tribunal submitting a request for the expedited procedure or the urgent procedure to be applied is asked to state the e-mail address and any fax number which may be used by the Court of Justice, together with the e-mail addresses and any fax numbers of the representatives of the parties to the proceedings.

46. A copy of the signed order for reference together with a request for the expedited procedure or the urgent procedure to be applied can initially be sent to the Court by e-mail (ECJ-Registry@curia.europa.eu) or by fax (+352 43 37 66). Processing of the reference and of the request can then begin upon receipt of the e-mailed or faxed copy. The originals of those documents must, however, be sent to the Court Registry as soon as possible.

excluded from review by the Court when hearing an application for a preliminary ruling.[1]

3. The European Economic Community constitutes a new legal order of international law for the benefit of which the states have limited their sovereign rights, albeit within limited fields, and the subjects of which comprise not only the Member States but also their nationals.
Independently of the legislation of Member States, Community law not only imposes obligations on individuals but is also intended to confer upon them rights which become part of their legal heritage. These rights arise not only where they are expressly granted by the Treaty but also by reason of obligations which the Treaty imposes in a clearly defined way upon individuals as well as upon the Member States and upon the institutions of the Community.

4. The fact that Articles 169 and 170 of the EEC Treaty enable the Commission and the Member States to bring before the Court a State which has not fulfilled its obligations does not deprive individuals of the right to plead the same obligations, should the occasion arise, before a national court.

5. According to the spirit, the general scheme and the wording of the EEC Treaty, Article 12 must be interpreted as producing direct effects and creating individual rights which national courts must protect.

6. It follows from the wording and the general scheme of Article 12 of the Treaty that, in order to ascertain whether customs duties and charges having equivalent effect have been increased contrary to the prohibition contained in the said Article, regard must be had to the customs duties and charges actually applied by Member States at the date of the entry into force of the Treaty.[2]

7. Where, after the entry into force of the Treaty, the same product is charged with a higher rate of duty, irrespective of whether this increase arises from an actual increase of the rate of customs duty or from a rearrangement of the tariff resulting in the classification of the product under a more highly taxed heading, such increase is illegal under Article 12 of the EEC Treaty.

In Case 26/62

Reference to the Court under subparagraph (a) of the first paragraph and under the third paragraph of Article 177 of the Treaty establishing the European Economic Community by the Tariefcommissie, a Netherlands administrative tribunal having final jurisdiction in revenue cases, for a preliminary ruling in the action pending before that court between

N.V. ALGEMENE TRANSPORT- EN EXPEDITIE ONDERNEMING VAN GEND & LOOS, having its registered office at Utrecht, represented by H.G. Stibbe and L.F.D. ter Kuile, both Advocates of Amsterdam, with an address for

1 — Cf. Paragraph No 4 of Summary of Judgment in Case 13/61, Rec. 1962., p. 94.
2 — Cf. Paragraph No 1 of Summary of Judgment in Case 10/61, Rec. 1962., p. 5.

service in Luxembourg at the Consulate-General of the Kingdom of the Netherlands

and

NEDERLANDSE ADMINISTRATIE DER BELASTINGEN (NETHERLANDS INLAND REVENUE ADMINISTRATION), represented by the Inspector of Customs and Excise at Zaandam, with an address for service in Luxembourg at the Netherlands Embassy,

on the following questions:

1. Whether Article 12 of the EEC Treaty has direct application within the territory of a Member State, in other words, whether nationals of such a State can, on the basis of the Article in question, lay claim to individual rights which the courts must protect;

2. In the event of an affirmative reply, whether the application of an import duty of 8% to the import into the Netherlands by the applicant in the main action of ureaformaldehyde originating in the Federal Republic of Germany represented an unlawful increase within the meaning of Article 12 of the EEC Treaty or whether it was in this case a reasonable alteration of the duty applicable before 1 March 1960, an alteration which, although amounting to an increase from the arithmetical point of view, is nevertheless not to be regarded as prohibited under the terms of Article 12;

THE COURT

composed of: A. M. Donner, President, L. Delvaux and R. Rossi (Presidents of Chambers), O. Riese, Ch. L. Hammes (Rapporteur), A. Trabucchi and R. Lecourt, Judges,

Advocate-General: K. Roemer
Registrar: A. Van Houtte

gives the following

JUDGMENT

Issues of fact and of law

I — Facts and procedure

The facts and the procedure may be summarized as follows:

1. On 9 September 1960 the company N. V. Algemene Transport- en Expeditie Onderneming van Gend en Loos (hereinafter called 'Van Gend & Loos'), according to a customs declaration of 8 September on form D.5061, imported into the Netherlands from the Federal Republic of Germany a quantity of ureaformaldehyde, described in the import document as 'Harnstoffharz (U.F. resin) 70, aqueous emulsion of ureaformaldehyde'.

2. On the date of importation, the product in question was classified in heading 39.01-a-1 of the tariff of import duties listed in the 'Tariefbesluit' which entered into force on 1 March 1960. The nomenclature of the 'Tariefbesluit' is taken from the protocol concluded between the Kingdom of Belgium, the Grand Duchy of Luxembourg and the Kingdom of the Netherlands at Brussels on 25 July 1958, ratified in the Netherlands by the Law of 16 December 1959.

3. The wording of heading 39.01-a-1 was as follows:

'Products of condensation, poly-condensation and poly-addition, whether modified or not, polymerized, or linear (phenoplasts, aminoplasts, alkyds, allylic polyesters and other non-saturated polyesters, silicones etc. . . .):

(a) Liquid or paste products, including emulsions, dispersions and solutions:

	Duties applicable gen. %	spec. %
1. Aminoplasts in aqueous emulsions, dispersions or solutions	10%	8%'

4. On this basis, the Dutch revenue authorities applied an *ad valorem* import duty of 8% to the importation in question.

5. On 20 September 1960 Van Gend & Loos lodged an objection with the Inspector of Customs and Excise at Zaandam against the application of this duty in the present case. The company put forward in particular the following arguments:

On 1 January 1958, the date on which the EEC Treaty entered into force, aminoplasts in emulsion were classified under heading 279-a-2 of the tariff in the 'Tariefbesluit' of 1947, and charged with an *ad valorem* import duty of 3%. In the 'Tariefbesluit' which entered into force on 1 March 1960, heading 279-a-2 was replaced by heading 39.01-a.

Instead of applying, in respect of intra-Community trade, an import duty of 3% uniformly to all products under the old heading 279-a-2, a sub-division was created: 39.01-a-1, which contained only aminoplasts in aqueous emulsions, dispersions or solutions, and in respect of which import duty was fixed at 8%. For the other products in heading 39.01-a, which also had been included in the old heading 279-a-2, the import duty of 3% applied on 1 January 1958 was maintained.

By thus increasing the import duty on the product in question after the entry

into force of the EEC Treaty, the Dutch Government infringed Article 12 of that Treaty, which provides that Member States shall refrain from introducing between themselves any new customs duties on imports or exports or any charges having equivalent effect, and from increasing those which they already apply in their trade with each other.

6. The objection of Van Gend & Loos was dismissed on 6 March 1961 by the Inspector of Customs and Excise at Zaandam on the ground of inadmissibility, because it was not directed against the actual application of the tariff but against the rate.

7. Van Gend & Loos appealed against this decision to the Tariefcommissie, Amsterdam, on 4 April 1961.

8. The case was heard by the Tariefcommissie on 21 May 1962. In support of its application for the annulment of the contested decision Van Gend & Loos put forward the arguments already submitted in its objection of 20 September 1960. The Nederlandse administratie der belastingen replied in particular that when the EEC Treaty entered into force the product in question was not charged under the heading 279-a-2 with a duty of only 3% but, because of its composition and intended application, was classified under heading 332 bis ('synthetic and other adhesives, not stated or included elsewhere') and charged with a duty of 10% so that there had not in fact been any increase.

9. The Tariefcommissie, without giving a formal decision on the question whether the product in question fell within heading 332 bis or heading 279-a-2 of the 1947 'Tariefbesluit', took the view that the arguments of the parties raised a question concerning the interpretation of the EEC Treaty. It therefore suspended the proceedings and, in conformity with the third paragraph of Article 177 of the Treaty, referred to the Court of Justice on 16 August 1962, for a preliminary ruling the two questions set out above.

10. The decision of the Tariefcommissie was notified on 23 August 1962 by the Registrar of the Court to the parties to the action, to the Member States and to the Commission of the EEC.

11. Pursuant to Article 20 of the Protocol on the Statute of the Court of Justice of the EEC written observations were submitted to the Court by the parties to the main action, by the Government of the Kingdom of Belgium, the Government of the Federal Republic of Germany, the Commission of the EEC and the Government of the Kingdom of the Netherlands.

12. At the public hearing the Court on 29 November 1962, the oral submissions of the plaintiff in the main action and of the Commission of the EEC were heard. At the same hearing questions were put to them by the Court. Written replies to these were supplied within the prescribed time.

13. The Advocate-General gave his reasoned oral opinion at the hearing on 12 December 1962, in which he proposed that the Court should in its judgment only answer the first question referred to it and hold that Article 12 of the EEC Treaty imposes a duty only on Member States.

II—Arguments and observations

The arguments contained in the observations submitted in accordance with the second paragraph of Article 20 of the Protocol on the Statute of the Court of Justice of the European Economic Community by the parties to the main action, the Member States and the Commission may be summarized as follows:

A—*The first question*

Admissibility

The *Netherlands Government,* the

Belgian Government and the *Nederlandse administratie der belastingen* (which in its statement of case declared that it was in complete agreement with the observations submitted by the Netherlands Government) confirm that the main complaint of Van Gend & Loos against the Governments of the Benelux countries is that by the Brussels Protocol of 25 July 1958 they infringed Article 12 of the EEC Treaty by increasing after its entry into force a customs duty applied in their trade with other Member States of the Communities.

The *Netherlands Government* disputes whether an alleged infringement of the Treaty by a Member State can be submitted to the judgment of the Court by a procedure other than that laid down by Article 169 or 170, that is to say on the initiative of another Member State or of the Commission. It maintains in particular that the matter cannot be brought before the Court by means of the procedure of reference for a preliminary ruling under Article 177.

The Court, according to the Netherlands Government, cannot, in the context of the present proceedings, decide a problem of this nature, since it does not relate to the interpretation but to the application of the Treaty in a specific case.

The *Belgian Government* maintains that the first question is a reference to the Court of a problem of constitutional law, which falls exclusively within the jurisdiction of the Netherlands court.

That court is confronted with two international treaties both of which are part of the national law. It must decide under national law—assuming that they are in fact contradictory—which treaty prevails over the other or more exactly whether a prior national law of ratification prevails over a subsequent one.

This is a typical question of national constitutional law which has nothing to do with the interpretation of an Article of the EEC Treaty and is within the exclusive jurisdiction of the Netherlands court, because it can only be answered according to the constitutional principles and jurisprudence of the national law of the Netherlands.

The Belgian Government also points out that a decision on the first question referred to the Court is not only unnecessary to enable the Tariefcommissie to give its judgment but cannot even have any influence on the solution to the actual problem which it is asked to resolve.

In fact, whatever answer the Court may give, the Tariefcommissie has to solve the same problem: Has it the right to ignore the law of 16 December 1959 ratifying the Brussels Protocol, because it conflicts with an earlier law of 5 December 1957 ratifying the Treaty establishing the EEC?

The question raised is not therefore an appropriate question for a preliminary ruling, since its answer cannot enable the court which has to adjudicate upon the merits of the main action to make a final decision in the proceedings pending before it.

The *Commission of the EEC*, on the other hand, observes that the effect of the provisions of the Treaty on the national law of Member States cannot be determined by the actual national law of each of them but by the Treaty itself. The problem is therefore without doubt one of interpretation of the Treaty.

Further the Commission calls attention to the fact that a finding of inadmissibility would have the paradoxical and shocking result that the rights of individuals would be protected in all cases of infringement of Community law except in the case of an infringement by a Member State.

On the substance

Van Gend & Loos answers in the affirmative the question whether the Article has internal effect.

It maintains in particular that:

—Article 12 is applicable without any preliminary incorporation in the national legislation of Member States, since it only imposes a negative obligation;

—it has direct effect without any further measures of implementation under Community legislation, as all the customs duties applied by Member States in their trade with each other were bound on 1 January 1957 (Article 14 of the Treaty);

—although the Article does not directly refer to the nationals of Member States but to the national authorities, infringement of it adversely affects the fundamental principles of the Community, and individuals as well as the Community must be protected against such infringements;

—it is particularly well adapted for direct application by the national court which must set aside the application of customs duties introduced or increased in breach of its provisions.

The *Commission* emphasizes the importance of the Court's answer to the first question. It will have an effect not only on the interpretation of the provision at issue in a specific case and on the effect which will be attributed to it in the legal systems of Member States but also on certain other provisions of the Treaty which are as clear and complete as Article 12.

According to the Commission an analysis of the legal structure of the Treaty and of the legal system which it establishes shows on the one hand that the Member States did not only intend to undertake mutual commitments but to establish a system of Community law, and on the other hand that they did not wish to withdraw the application of this law from the ordinary jurisdiction of the national courts of law.

However, Community law must be effectively and uniformly applied throughout the whole of the Community.

The result is first that the effect of Community law on the internal law of Member States cannot be determined by this internal law but only by Community law, further that the national courts are bound to apply directly the rules of Community law and finally that the national court is bound to ensure that the rules of Community law prevail over conflicting national laws even if they are passed later.

The Commission observes in this context that the fact that a Community rule is, as regards its form, directed to the states does not of itself take away from individuals who have an interest in it the right to require it to be applied in the national courts.

As regards more particularly the question referred to the Court, the Commission is of the opinion that Article 12 contains a rule of law capable of being effectively applied by the national court.

It is a provision which is perfectly clear in the sense that it creates for Member States a specific unambiguous obligation relating to the extension of their internal law in a matter which directly affects their nationals and it is not affected or qualified by any other provision of the Treaty.

It is also a complete and self-sufficient provision in that it does not require on a Community level any new measure to give concrete form to the obligation which it defines.

The *Netherlands Government* draws a distinction between the question of the internal effect and that of the direct effect (or direct applicability), the first, according to it, being a pre-condition of the second.

It considers that the question whether a particular provision of the Treaty has an internal effect can only be answered in the affirmative, if all the essential elements, namely the intention of the contracting parties and the material

terms of the provision under consideration, allows such a conclusion.

With regard to the intention of the parties to the Treaty the Netherlands Government maintains that an examination of the actual wording is sufficient to establish that Article 12 only places an obligation on Member States, who are free to decide how they intend to fulfil this obligation. A comparison with other provisions of the Treaty confirms this finding.

As Article 12 does not have internal effect it cannot, *a fortiori,* have direct effect.

Even if the fact that Article 12 places an obligation on Member States were to be considered as an internal effect, it cannot have direct effect in the sense that it permits the nationals of Member States to assert subjective rights which the courts must protect.

Alternatively the Netherlands Government argues that, so far as the necessary conditions for its direct application are concerned, the EEC Treaty does not differ from a standard international treaty. The conclusive factors in this respect are the intention of the parties and the provisions of the Treaty.

However the question whether under Netherlands constitutional law Article 12 is directly applicable is one concerning the interpretation of Netherlands law and does not come within the jurisdiction of the Court of Justice.

Finally the Netherlands Government indicates what the effect would be, in its view, of an affirmative answer to the first question put by the Tariefcommissie:

—it would upset the system which the authors of the Treaty intended to establish;

—it would create, with regard to the many provisions in Community regulations which expressly impose obligations on Member States, an uncertainty in the law of a kind which could call in question the readiness of these States to cooperate in the future;

—it would put in issue the responsibility of States by means of a procedure which was not designed for this purpose.

The *Belgian Government* maintains that Article 12 is not one of the provisions —which are the exception in the Treaty —having direct internal effect.

Article 12 does not constitute a rule of law of general application providing that any introduction of a new customs duty or any increase in an existing duty is automatically without effect or is absolutely void. It merely obliges Member States to refrain from taking such measures.

It does not create therefore a directly applicable right which nationals could invoke and enforce. It requires from Governments action at a later date to attain the objective fixed by the Treaty. A national court cannot be asked to enforce compliance with this obligation.

The *German Government* is also of the opinion that Article 12 of the EEC Treaty does not constitute a legal provision which is directly applicable in all Member States. It imposes on them an international obligation (in the field of customs policy) which must be implemented by national authorities endowed with legislative powers.

Customs duties applicable to a citizen of a Member State of the Community, at least during the transitional period, thus do not derive from the EEC Treaty or the legal measures taken by the institutions, but from legal measures enacted by Member States. Article 12 only lays down the provisions with which they must comply in their customs legislation.

Moreover the obligation laid down only applies to the other contracting Member States.

In German law a legal provision which laid down a customs duty contrary to the provisions of Article 12 would be perfectly valid.

Within the framework of the EEC Treaty the legal protection of nationals of Member States is secured, by provisions derogating from their national constitutional system, only in respect of those measures taken by the institutions of the Community which are of direct and individual concern to such nationals.

B—*The second question*

Admissibility

The *Netherlands* and *Belgian Governments* are of the opinion that the second as well as the first question is inadmissible.
According to them the answer to the question whether in fact the Brussels Protocol of 1958 represents a failure by those states who are signatories to fulfil the obligations laid down in Article 12 of the EEC Treaty cannot be given in the context of a preliminary ruling, because the issue is the application of the Treaty and not its interpretation. Moreover such an answer presupposes a careful study and a specific evaluation of the facts and circumstances peculiar to a given situation, and this is also inadmissible under Article 177.
The *Netherlands Government* emphasizes, furthermore, that if a failure by a state to fulfil its Community obligations could be brought before the Court by a procedure other than those under Articles 169 and 170 the legal protection of that state would be considerably diminished.
The *German Government,* without making a formal objection of inadmissibility, maintains that Article 12 only imposes an international obligation on states and that the question whether national rules enacted for its implementation do not comply with this obligation cannot depend upon a decision of the Court under Article 177 since it does not involve the interpretation of the Treaty.
Van Gend & Loos also considers that direct form of the second question would necessitate an examination of the facts for which the Court has no jurisdiction when it makes a ruling under Article 177. The real question for interpretation according to it could be worded as follows:
Is it possible for a derogation from the rules applied before 1 March 1960 (or more accurately, before 1 January 1958) not to be in the nature of an increase prohibited by Article 12 of the Treaty, even though this derogation arithmetically represents an increase?

On the substance

Van Gend & Loos repeats in detail the history of the classification of aminoplasts in the successive tariffs to show that the company was charged with a duty of 8% instead of 3% intentionally and not because of the inevitable effect of adapting the old tariff to the new. The Netherlands Government was therefore in breach of Article 12 of the EEC Treaty when it increased a customs duty applied in its trade with other Member States.
The *Netherlands* and *Belgian Governments* reply that, before the modification of the Benelux Tariff of 1958, ureaformaldehyde was not subject to an import duty of 3% laid down for heading 279-a-2 of the 'Tariefbesluit' of 1947, but to an import duty of 10% laid down for heading 332 bis (adhesives).
In fact experience showed that the goods in question were usually used as glue and that as a general rule they could be used as such. Therefore the ministries concerned decided that the product in question was always to be taxed as glue and was to be included under heading 332 bis.
Although, when the intended appli-

cation of the product in dispute was not sufficiently specified, the Tariefcommissie in certain cases classified it under heading 279-a-2, the authorities of the Benelux States charged it with an import duty of 10% from the date of the entry into force of the Brussels nomenclature, which put an end to any possible argument.

There can be no question, therefore, in this case, of an increase of a customs duty or of a derogation from the provisions of Article 12 of the Treaty.

Van Gend & Loos replies that only aqueous solutions of aminoplasts to which fillers or binders had been added and which only required the addition of a hardener to make an effective adhesive, that is to say, solutions which could be considered as raw materials, could be classified under heading 332 bis.

The *Commission of the EEC* is of the opinion first that the prohibition in Article 12 relates to all goods which are capable of being the subject matter of trade between Member States (to the extent to which such trade relates to products complying with the conditions of Article 9(2)).

Article 12 not only aims at the general maintenance of customs duties applied by the various Member States in their relations with each other but also relates to each individual product. It allows no exception even partial or provisional.

The Commission then points out that, in the context of Article 12, regard must be had to the duty actually applied when the Treaty entered into force. This duty results from the whole of the provisions and customary practice of administrative law.

However, an isolated classification under another tariff heading is in itself insufficient proof that the duty of 10% chargeable under heading 332 bis is not in fact applied to aminoplasts.

In this case it is necessary to recognize a concept of *prima facie* legality: when there is an official interpretation by the competent administration and instructions in conformity with this interpretation have been given to executive officers to fix the detailed rules for levying a duty, that is the 'duty applied' within the meaning of Article 12 of the Treaty.

The Commission, therefore, considers the duty of 10% as the duty applied on the entry into force of the Treaty. There has not therefore been in this case any increase contrary to Article 12.

Grounds of judgment

I — Procedure

No objection has been raised concerning the procedural validity of the reference to the Court under Article 177 of the EEC Treaty by the Tariefcommissie, a court or tribunal within the meaning of that Article. Further, no grounds exist for the Court to raise the matter of its own motion.

II — The first question

A — *Jurisdiction of the Court*

The Government of the Netherlands and the Belgian Government challenge the jurisdiction of the Court on the ground that the reference relates not to the interpretation but to the application of the Treaty in the context of

the constitutional law of the Netherlands, and that in particular the Court has no jurisdiction to decide, should the occasion arise, whether the provisions of the EEC Treaty prevail over Netherlands legislation or over other agreements entered into by the Netherlands and incorporated into Dutch national law. The solution of such a problem, it is claimed, falls within the exclusive jurisdiction of the national courts, subject to an application in accordance with the provisions laid down by Articles 169 and 170 of the Treaty.

However in this case the Court is not asked to adjudicate upon the application of the Treaty according to the principles of the national law of the Netherlands, which remains the concern of the national courts, but is asked, in conformity with subparagraph (a) of the first paragraph of Article 177 of the Treaty, only to interpret the scope of Article 12 of the said Treaty within the context of Community law and with reference to its effect on individuals. This argument has therefore no legal foundation.

The Belgian Government further argues that the Court has no jurisdiction on the ground that no answer which the Court could give to the first question of the Tariefcommissie would have any bearing on the result of the proceedings brought in that court.

However, in order to confer jurisdiction on the Court in the present case it is necessary only that the question raised should clearly be concerned with the interpretation of the Treaty. The considerations which may have led a national court or tribunal to its choice of questions as well as the relevance which it attributes to such questions in the context of a case before it are excluded from review by the Court of Justice.

It appears from the wording of the questions referred that they relate to the interpretation of the Treaty. The Court therefore has the jurisdiction to answer them.

This argument, too, is therefore unfounded.

B—*On the substance of the Case*

The first question of the Tariefcommissie is whether Article 12 of the Treaty has direct application in national law in the sense that nationals of Member States may on the basis of this Article lay claim to rights which the national court must protect.

To ascertain whether the provisions of an international treaty extend so far in their effects it is necessary to consider the spirit, the general scheme and the wording of those provisions.

The objective of the EEC Treaty, which is to establish a Common Market, the functioning of which is of direct concern to interested parties in the Community, implies that this Treaty is more than an agreement which merely creates mutual obligations between the contracting states. This view is confirmed by the preamble to the Treaty which refers not only to governments but to peoples. It is also confirmed more specifically by the establishment of institutions endowed with sovereign rights, the exercise of which affects Member States and also their citizens. Furthermore, it must be noted that the nationals of the states brought together in the Community are called upon to cooperate in the functioning of this Community through the intermediary of the European Parliament and the Economic and Social Committee.

In addition the task assigned to the Court of Justice under Article 177, the object of which is to secure uniform interpretation of the Treaty by national courts and tribunals, confirms that the states have acknowledged that Community law has an authority which can be invoked by their nationals before those courts and tribunals.

The conclusion to be drawn from this is that the Community constitutes a new legal order of international law for the benefit of which the states have limited their sovereign rights, albeit within limited fields, and the subjects of which comprise not only Member States but also their nationals. Independently of the legislation of Member States, Community law therefore not only imposes obligations on individuals but is also intended to confer upon them rights which become part of their legal heritage. These rights arise not only where they are expressly granted by the Treaty, but also by reason of obligations which the Treaty imposes in a clearly defined way upon individuals as well as upon the Member States and upon the institutions of the Community.

With regard to the general scheme of the Treaty as it relates to customs duties and charges having equivalent effect it must be emphasized that Article 9, which bases the Community upon a customs union, includes as an essential provision the prohibition of these customs duties and charges. This provision is found at the beginning of the part of the Treaty which defines the 'Foundations of the Community'. It is applied and explained by Article 12.

The wording of Article 12 contains a clear and unconditional prohibition which is not a positive but a negative obligation. This obligation, moreover, is not qualified by any reservation on the part of states which would make its implementation conditional upon a positive legislative measure enacted under national law. The very nature of this prohibition makes it ideally adapted to produce direct effects in the legal relationship between Member States and their subjects.

The implementation of Article 12 does not require any legislative intervention on the part of the states. The fact that under this Article it is the Member States who are made the subject of the negative obligation does not imply that their nationals cannot benefit from this obligation.

In addition the argument based on Articles 169 and 170 of the Treaty put forward by the three Governments which have submitted observations to the Court in their statements of case is misconceived. The fact that these Articles of the Treaty enable the Commission and the Member States to bring before the Court a State which has not fulfilled its obligations does not mean that individuals cannot plead these obligations, should the occasion arise, before a national court, any more than the fact that the Treaty places at the disposal of the Commission ways of ensuring that obligations imposed upon those subject to the Treaty are observed, precludes the possibility, in actions between individuals before a national court, of pleading infringements of these obligations.

A restriction of the guarantees against an infringement of Article 12 by Member States to the procedures under Article 169 and 170 would remove all direct legal protection of the individual rights of their nationals. There is the risk that recourse to the procedure under these Articles would be ineffective if it were to occur after the implementation of a national decision taken contrary to the provisions of the Treaty.

The vigilance of individuals concerned to protect their rights amounts to an effective supervision in addition to the supervision entrusted by Articles 169 and 170 to the diligence of the Commission and of the Member States.

It follows from the foregoing considerations that, according to the spirit, the general scheme and the wording of the Treaty, Article 12 must be interpreted as producing direct effects and creating individual rights which national courts must protect.

III — The second question

A—*The jurisdiction of the Court*

According to the observations of the Belgian and Netherlands Governments, the wording of this question appears to require, before it can be answered, an examination by the Court of the tariff classification of ureaformaldehyde imported into the Netherlands, a classification on which Van Gend & Loos and the Inspector of Customs and Excise at Zaandam hold different opinions with regard to the 'Tariefbesluit' of 1947. The question clearly does not call for an interpretation of the Treaty but concerns the application of Netherlands customs legislation to the classification of aminoplasts, which is outside the jurisdiction conferred upon the Court of Justice of the European Communities by subparagraph (a) of the first paragraph of Article 177.

The Court has therefore no jurisdiction to consider the reference made by the Tariefcommissie.

However, the real meaning of the question put by the Tariefcommissie is whether, in law, an effective increase in customs duties charged on a given product as a result not of an increase in the rate but of a new classification of the product arising from a change of its tariff description contravenes the prohibition in Article 12 of the Treaty.

Viewed in this way the question put is concerned with an interpretation of this provision of the Treaty and more particularly of the meaning which should be given to the concept of duties applied before the Treaty entered into force.

Therefore the Court has jurisdiction to give a ruling on this question.

B—*On the substance*

It follows from the wording and the general scheme of Article 12 of the Treaty that, in order to ascertain whether customs duties or charges having equivalent effect have been increased contrary to the prohibition contained in the said Article, regard must be had to the customs duties and charges actually applied at the date of the entry into force of the Treaty.

Further, with regard to the prohibition in Article 12 of the Treaty, such an illegal increase may arise from a re-arrangement of the tariff resulting in the

classification of the product under a more highly taxed heading and from an actual increase in the rate of customs duty.

It is of little importance how the increase in customs duties occurred when, after the Treaty entered into force, the same product in the same Member State was subjected to a higher rate of duty.

The application of Article 12, in accordance with the interpretation given above, comes within the jurisdiction of the national court which must enquire whether the dutiable product, in this case ureaformaldehyde originating in the Federal Republic of Germany, is charged under the customs measures brought into force in the Netherlands with an import duty higher than that with which it was charged on 1 January 1958.

The Court has no jurisdiction to check the validity of the conflicting views on this subject which have been submitted to it during the proceedings but must leave them to be determined by the national courts.

IV — Costs

The costs incurred by the Commission of the EEC and the Member States which have submitted their observations to the Court are not recoverable, and as these proceedings are, in so far as the parties to the main action are concerned, a step in the action pending before the Tariefcommissie, the decision as to costs is a matter for that court.

On those grounds,

Upon reading the pleadings;
Upon hearing the report of the Judge-Rapporteur;
Upon hearing the parties;
Upon hearing the opinion of the Advocate-General;
Having regard to Articles 9, 12, 14, 169, 170 and 177 of the Treaty establishing the European Economic Community;
Having regard to the Protocol on the Statute of the Court of Justice of the European Economic Community;
Having regard to the Rules of Procedure of the Court of Justice of the European Communities;

THE COURT

in answer to the questions referred to it for a preliminary ruling by the Tariefcommissie by decision of 16 August 1962, hereby rules:

1. **Article 12 of the Treaty establishing the European Economic Community produces direct effects and creates individual rights which national courts must protect.**

2. **In order to ascertain whether customs duties or charges having equivalent effect have been increased contrary to the prohibition contained in Article 12 of the Treaty, regard must be had to the duties and charges actually applied by the Member State in question at the date of the entry into force of the Treaty.**
Such an increase can arise both from a re-arrangement of the tariff resulting in the classification of the product under a more highly taxed heading and from an increase in the rate of customs duty applied.

3. **The decision as to costs in these proceedings is a matter for the Tariefcommissie.**

Donner Delvaux Rossi

Riese Hammes Trabucchi Lecourt

Delivered in open court in Luxembourg on 5 February 1963.

A. Van Houtte — Registrar

A. M. Donner — President

OPINION OF MR ADVOCATE-GENERAL KARL ROEMER DELIVERED ON 12 DECEMBER 1962[1]

Mr President,

Members of the Court,

The present proceedings originate in an action before the Tariefcommissie, a Dutch administrative court. This action is for the annulment of a decision of the Nederlandse administratie der belastingen (the Netherlands Inland Revenue Administration) of 6 March 1961 concerning the application of a particular customs duty to the import of urea-formaldehyde from the Federal Republic of Germany. The decision is based on

1 — Translated from the German.

seeing that the Member States respect those obligations which have been imposed upon them by the Treaty and which bind them as States without creating individual rights, but this obligation on the part of the Commission does not give individuals the right to allege, in Community law or under Article 177, either failure by the State concerned to fulfil any of its obligations or breach of duty on the part of the Commission.

5. Article 102 of the EEC Treaty contains no provisions which are capable of creating individual rights which national courts must protect.

6. Article 93 of the EEC Treaty contains no provisions which are capable of creating individual rights which national courts must protect.

7. A Member State's obligation under the EEC Treaty, which is neither subject to any conditions nor, as regards its execution or effect, to the adoption of any measure either by the States or by the Commission, is legally complete and consequently capable of producing direct effects on the relations between Member States and individuals. Such an obligation becomes an integral part of the legal system of the Member States, and thus forms part of their own law, and directly concerns their nationals in whose favour it has created individual rights which national courts must protect.

8. Article 53 of the EEC Treaty constitutes a Community rule capable of creating individual rights which national courts must protect.

9. Article 53 of the EEC Treaty is satisfied so long as no new measure subjects the establishment of nationals of other Member States to more severe rules than those prescribed for nationals of the country of establishment, whatever the legal system governing the undertakings.

10. Article 37 (2) of the EEC Treaty constitutes in all its provisions a rule of Community law capable of creating individual rights which national courts must protect.

11. The provisions of Article 37 (2) of the EEC Treaty have as their object the prohibition of any new measure contrary to the principles of Article 37 (1), that is any measure having as its object or effect a new discrimination between nationals of Member States regarding the conditions in which goods are procured and marketed, by means of monopolies or bodies which must, first, have as their object transactions regarding a commercial product capable of being the subject of competition and trade between Member States, and secondly must play an effective part in such trade.
It is a matter for the court dealing with the main action to assess in each case whether the economic activity under review relates to such a product which, by virtue of its nature and the technical or international conditions to which it is subject, is capable of playing such a part in imports or exports between nationals of the Member States.

In Case 6/64

Reference to the Court under Article 177 of the EEC Treaty by the Giudice Conciliatore, Milan, for a preliminary ruling in the action pending before that court between

FLAMINIO COSTA

and

ENEL (Ente Nazionale Energia Elettrica (National Electricity Board), formerly the Edison Volta undertaking)

on the interpretation of Articles 102, 93, 53 and 37 of the said Treaty

THE COURT

composed of: A. M. Donner, President, Ch. L. Hammes and A. Trabucchi, Presidents of Chambers, L. Delvaux, R. Rossi, R. Lecourt (Rapporteur) and W. Strauß, Judges,

Advocate-General: M. Lagrange
Registrar: A. Van Houtte

gives the following

JUDGMENT

Issues of fact and of law

I — Facts and procedure

By Law No 1643 of 6 December 1962 and subsequent decrees the Italian Republic nationalized the production and distribution of electric energy and created an organization, the Ente Nazionale Energia Elettrica (or ENEL) (National Electricity Board) to which the assets of the electricity undertakings were transferred.

In proceedings about the payment of an invoice for electricity between Flaminio Costa and ENEL, before the Giudice Conciliatore, Milan, Mr Costa, as a shareholder of Edison Volta, a company affected by the nationalization, and as an electricity consumer, requested the court to apply Article 177 of the EEC Treaty so as to obtain an interpretation of Articles 102, 93, 53 and 37 of the said Treaty, which Articles, he alleged, had been infringed by the Law of 6 December 1962. The Giudice Conciliatore, by order of 16 January 1964 acceding to this request, decided as follows:

> 'Having regard to Article 177 of the Treaty of 25 March 1957 establishing the EEC, incorporated into Italian law by Law No 1203 of 14 October 1957, and having regard to the allegation that Law No 1643 of 6 December 1962 and the presidential decrees issued in execution of that Law (No 1670 of 15 December 1962, No 36 of 4 February 1963, No 138 of 25 February 1963 and No 219 of 14 March 1963) infringe Articles 102, 93, 53 and 37 of the aforementioned Treaty, the Court hereby stays the proceedings and orders that a certified copy of the file be transmitted to the Court of Justice of the European Economic Community in Luxembourg.'

This application for a preliminary ruling was transmitted by the Registrar of the Giudice Conciliatore to the Court and was received in the Court Registry on

20 February 1964.
Mr Costa set out his observations in his written statement of case lodged on 15 May 1964. He asked the Court 'for an interpretation of the Treaty, in particular of Articles 102, 93, 53 and 37'.
In its statement of case lodged on 23 May 1964, the Italian Government submitted that the application for a preliminary ruling was 'absolutely inadmissible' and that there were no grounds for raising the questions referred. ENEL, in its statement of case lodged on the same day, also submitted that there were no grounds for raising these questions.
In its statement of case dated 23 May 1964, the EEC Commission made its observations both on the relevance of the questions put and on the interpretation of the abovementioned Articles.
The Court also received an 'application to intervene', filed in the Registry on 20 May 1964, which was declared inadmissible by order of 3 June 1964.

II — Observations submitted under Article 20 of the Statute of the Court

On the admissibility of the reference for a preliminary ruling

The *Italian Government* complains that the Giudice Conciliatore did not restrict itself to asking the Court to interpret the Treaty but also asked it to declare whether the Italian law in dispute was in conformity with the Treaty, and that because of this the preliminary ruling is inadmissible.
A national court, it is claimed, cannot have recourse to this procedure when, for the purposes of deciding a dispute it has only to apply a domestic law and not a provision of the Treaty. Article 177 cannot be used as a means of allowing a national court, on the initiative of a national of a Member State, to subject a law of that State to the procedure for a preliminary ruling for infringement of the obligations of the Treaty. The only procedure possible is that under Articles 169 and 170 and consequently the present proceedings before the Court of Justice are 'absolutely inadmissible'.
Mr Costa claims on the other hand that by the Treaty the jurisdiction of the Court depends on the mere existence of a request within the meaning of Article 177 and it appears from the question submitted that it involves a case of interpretation of the Treaty; it is not for the Court of Justice to judge the facts or the considerations which may have led the national court to make its choice of questions.
Finally the *Commission* raises the point that the Court's examination cannot concern itself with the reasons which led the national court to adopt its questions or with their importance for the solution of the dispute. In this case their wording seems to bear a resemblance to an action for failure to fulfil a Community obligation as envisaged under Articles 169 and 170 and as such is inadmissible. It is however for the Court to decide from the questions referred those relating solely to the subject of interpretation as permitted by Article 177.
Finally the Commission points out that in a judgment dated 7 March 1964 the Italian constitutional court failed to apply this Article in a similar case and thus took a decision involving certain repercussions on the future of Community law as a whole.

On the interpretation of Article 102

As to the interpretation of Article 102, *Mr Costa* suggests that prior consultation with the Commission should be regarded as an obligation for the Member State in question and not as a mere right. Any other interpretation of Article 102 would deprive it of its purpose. Failure to consult the Commission, when faced with the existence of a potential danger of distortion, consti-

tutes an irregularity. A Member State cannot itself appreciate the likelihood of distortion without unilaterally assuming a power which has not been conferred on it.

The *Commission* denies the existence of a distortion. It seems to state however that, if there is any doubt as to its existence, then there would be grounds for consulting the Commission and that, at the time when the disputed law concerning nationalization was adopted, the Italian Republic did not respect the rule of procedure applicable in this case.

The *Italian Government* points out that the Commission, when informed by a written question submitted by a German deputy, accepted nationalization in this case and referred to Article 222. There is no distortion within the meaning of Article 102 as long as it is a question of setting up a public service intended to achieve the objectives of public utility indicated in Article 43 of the Italian constitution and as long as the conditions of competition are not adversely affected.

ENEL puts forward similar arguments and points out that the establishment of a public service applies equally to all those coming under the scheme.

On the interpretation of Article 93

With regard to the interpretation of Article 93, *Mr Costa* considers that the nationalization of an economic activity automatically results in the creation of a system in which hidden aid is granted to the nationalized sector. The Commission must accordingly intervene in accordance with the procedure prescribed by Article 93.

The *Commission* considers that Member States which do not respect the provisions of Article 93 (3) are committing a procedural infringement which itself suffices to entitle the Commission to take action under Article 169. The Commission nevertheless retains the power to bring the matter before the Court of Justice in cases where the material incompatibility of the aid in dispute is accompanied by infringement of the procedural rule under consideration.

The Commission has studied the draft law in dispute but without coming to the conclusion that it is incompatible with the Common Market. In the Commission's opinion the only question relates to the matter of procedure and concerns the failure to notify. The Commission reserves the right to take action if the aid in question proves to be incompatible with the Treaty.

The *Italian Government* and *ENEL* point out that the facts show that there is no incompatibility between the Law on nationalization and Article 93.

The establishment of ENEL has nothing to do with Community law.

On the interpretation of Article 53

With regard to the interpretation of Article 53 which prohibits States from introducing any new restrictions on the right of establishment in their territories, *Mr Costa* claims to see in the nationalization of a sector of the economy a measure incompatible with the above Article.

Article 222 cannot justify the legality of every conceivable system of property ownership and the abolition of private property is contrary to the above Article.

No rule exempts a nationalized sector from the application of Article 53.

Nationalization constitutes a denial of a Community system and is the method best calculated to prevent the freedom of establishment enshrined by the said Article with regard to nationals both of other Member States and of the nationalizing state.

Finally, Article 55 cannot be considered as derogating from Article 53, as the former is exclusively concerned with exempting from the ambit of the latter the official powers of the State and not the power to pursue an economic activity.

The *Italian Government* objects to this interpretation on the ground that Article 53 does not apply where the Member State concerned leaves to free private enterprise (without any distinction as to nationality) that part of the economy which is not reserved to the public authorities.

In support of the same interpretation *ENEL* suggests that Article 53 should be regarded as intended to place foreigners on the same footing as nationals as regards the exercise of a productive activity.

This principle is not infringed if a law instituting a public service reserves to the State the relevant sector of the economy, by the same token excluding nationals and foreigners alike from this sector.

The *Commission* considers that, when regarded in the light of Article 222, nationailization is not inconsistent with the Treaty. Articles 5 and 90 are aimed at alleviating the consequences resulting from the operation of nationalizing sectors of the economy. Article 53 however applies to possible restrictions on the right of establishment of nationals of other States which might result from a case of nationalization, such restrictions not being justified by technical requirements in the sector in question.

On the interpretation of Article 37

In respect of the requirements of Article 37 to the effect that Member States shall progressively adjust any State monopolies of a commercial character so as to avoid all discrimination between nationals of Member States regarding the conditions under which goods are procured and marketed, *Mr Costa* asks the Court to interpret this provision very widely in such a way that it refers to every measure by which a State confers either on itself or on a body subject to it a monopoly which is by its very nature commercial.

The said Article applies, he claims, not only to actual cases of discrimination but also to potential discrimination and it would have no effect if its only purpose were to eliminate existing cases of discrimination whilst allowing the establishment of new ones. The consequences of nationalization are identical to those of a legal monopoly, in other words the sole power of management, the binding and ineluctable character of its decisions, the power in reaching those decisions to adopt criteria outside the field of economics and the exclusion of competition. Therefore, the result of such a monopoly is to render the importation of similar goods produced by foreign undertakings difficult if not impossible.

By creating a commercial monopoly, nationalization has the same restrictive effect on imports as protective duties or quantitative restrictions.

Rebutting this interpretation the *Italian Government* submits that Article 37 can have nothing to do with the operation of a public service nor with an article whose production depends on limited natural sources (themselves subject to a public concession) which can only be used by a necessarily limited number of producers. The rules of the Treaty safeguarding a free market cannot be concerned with the system of public services.

Moreover, as Article 222 in no way prejudices the rules in Member States governing the system of property ownership, it is possible for the constitutional authorities in each to prescribe the goods and services capable of being considered as public property and which, on the basis of objective decisions, remain outside any rule on competition. Consequently, the exclusion of exports and imports in such a sector must be considered not in terms of a commercial activity but rather of the exercise of a public service.

In support of this interpretation and by reference to the position of Article 37 in the Treaty, *ENEL* considers the 'commercial monopolies' specified in the said Article to be public or private

organizations aiming, as institutions, to make a concentration of exports and imports calculated to disturb the free movement of goods. That could never be the objective of a public service; moreover international trade in a particular article depends on international agreements and complex administrative procedures and is by its very nature outside the requirements of Article 37 and any provision relating to competition.

The *Commission* finally considers that Article 37 should be applied whenever a State establishes an exclusive right to import or export. To fall within the prohibitions in Article 37 the impugned measure must be intended to operate in the field of the circulation of goods or services. Although nationalization may be considered as permissible under Article 222, the creation of a new monopoly cannot.

However, a factual estimate of the trade in existence between Member States in respect of the commodity in question must be taken into consideration.

There is no need to inquire whether the creation of a monopoly of a commercial character is inconsistent with Article 37 (2), where the importation and exportation of the said commodity are not subject to the discretionary power of the administering body.

Grounds of judgment

By Order dated 16 January 1964, duly sent to the Court, the Giudice Conciliatore of Milan, 'having regard to Article 177 of the Treaty of 25 March 1957 establishing the EEC, incorporated into Italian law by Law No 1203 of 14 October 1957, and having regard to the allegation that Law No 1643 of 6 December 1962 and the presidential decrees issued in execution of that Law . . . infringe Articles 102, 93, 53 and 37 of the aforementioned Treaty', stayed the proceedings and ordered that the file be transmitted to the Court of Justice.

On the application of Article 177

On the submission regarding the working of the question

The complaint is made that the intention behind the question posed was to obtain, by means of Article 177, a ruling on the compatibility of a national law with the Treaty.

By the terms of this Article, however, national courts against whose decisions, as in the present case, there is no judicial remedy, must refer the matter to the Court of Justice so that a preliminary ruling may be given upon the 'interpretation of the Treaty' whenever a question of interpretation is raised before them. This provision gives the Court no jurisdiction either to apply the Treaty to a specific case or to decide upon the validity of a provision of

domestic law in relation to the Treaty, as it would be possible for it to do under Article 169.

Nevertheless, the Court has power to extract from a question imperfectly formulated by the national court those questions which alone pertain to the interpretation of the Treaty. Consequently a decision should be given by the Court not upon the validity of an Italian law in relation to the Treaty, but only upon the interpretation of the abovementioned Articles in the context of the points of law stated by the Giudice Conciliatore.

On the submission that an interpretation is not necessary

The complaint is made that the Milan court has requested an interpretation of the Treaty which was not necessary for the solution of the dispute before it.

Since, however, Article 177 is based upon a clear separation of functions between national courts and the Court of Justice, it cannot empower the latter either to investigate the facts of the case or to criticize the grounds and purpose of the request for interpretation.

On the submission that the court was obliged to apply the national law

The Italian Government submits that the request of the Giudice Conciliatore is 'absolutely inadmissible', inasmuch as a national court which is obliged to apply a national law cannot avail itself of Article 177.

By contrast with ordinary international treaties, the EEC Treaty has created its own legal system which, on the entry into force of the Treaty, became an integral part of the legal systems of the Member States and which their courts are bound to apply.

By creating a Community of unlimited duration, having its own institutions, its own personality, its own legal capacity and capacity of representation on the international plane and, more particularly, real powers stemming from a limitation of sovereignty or a transfer of powers from the States to the Community, the Member States have limited their sovereign rights, albeit within limited fields, and have thus created a body of law which binds both their nationals and themselves.

The integration into the laws of each Member State of provisions which derive from the Community, and more generally the terms and the spirit of the Treaty, make it impossible for the States, as a corollary, to accord

precedence to a unilateral and subsequent measure over a legal system accepted by them on a basis of reciprocity. Such a measure cannot therefore be inconsistent with that legal system. The executive force of Community law cannot vary from one State to another in deference to subsequent domestic laws, without jeopardizing the attainment of the objectives of the Treaty set out in Article 5 (2) and giving rise to the discrimination prohibited by Article 7.

The obligations undertaken under the Treaty establishing the Community would not be unconditional, but merely contingent, if they could be called in question by subsequent legislative acts of the signatories. Wherever the Treaty grants the States the right to act unilaterally, it does this by clear and precise provisions (for example Articles 15, 93 (3), 223, 224 and 225). Applications, by Member States for authority to derogate from the Treaty are subject to a special authorization procedure (for example Articles 8 (4), 17 (4), 25, 26, 73, the third subparagraph of Article 93 (2), and 226) which would lose their purpose if the Member States could renounce their obligations by means of an ordinary law.

The precedence of Community law is confirmed by Article 189, whereby a regulation 'shall be binding' and 'directly applicable in all Member States'. This provision, which is subject to no reservation, would be quite meaningless if a State could unilaterally nullify its effects by means of a legislative measure which could prevail over Community law.

It follows from all these observations that the law stemming from the Treaty, an independent source of law, could not, because of its special and original nature, be overridden by domestic legal provisions, however framed, without being deprived of its character as Community law and without the legal basis of the Community itself being called into question.

The transfer by the States from their domestic legal system to the Community legal system of the rights and obligations arising under the Treaty carries with it a permanent limitation of their sovereign rights, against which a subsequent unilateral act incompatible with the concept of the Community cannot prevail. Consequently Article 177 is to be applied regardless of any domestic law, whenever questions relating to the interpretation of the Treaty arise.

The questions put by the Giudice Conciliatore regarding Articles 102, 93, 53, and 37 are directed first to enquiring whether these provisions produce direct effects and create individual rights which national courts must protect, and, if so, what their meaning is.

On the interpretation of Article 102

Article 102 provides that, where 'there is reason to fear' that a provision laid down by law may cause 'distortion', the Member State desiring to proceed therewith shall 'consult the Commission'; the Commission has power to recommend to the Member States the adoption of suitable measures to avoid the distortion feared.

This Article, placed in the chapter devoted to the 'Approximation of Laws', is designed to prevent the differences between the legislation of the different nations with regard to the objectives of the Treaty from becoming more pronounced. By virtue of this provision, Member States have limited their freedom of initiative by agreeing to submit to an appropriate procedure of consultation. By binding themselves unambiguously to prior consultation with the Commission in all those cases where their projected legislation might create a risk, however slight, of a possible distortion, the States have undertaken an obligation to the Community which binds them as States, but which does not create individual rights which national courts must protect. For its part, the Commission is bound to ensure respect for the provisions of this Article, but this obligation does not give individuals the right to allege, within the framework of Community law and by means of Article 177 either failure by the State concerned to fulfil any of its obligations or breach of duty on the part of the Commission.

On the interpretation of Article 93

Under Article 93 (1) and (2), the Commission, in cooperation with Member States, is to 'keep under constant review all systems of aid existing in those States' with a view to the adoption of appropriate measures required by the functioning of the Common Market.

By virtue of Article 93 (3), the Commission is to be informed, in sufficient time, of any plans to grant or alter aid, the Member State concerned not being entitled to put its proposed measures into effect until the Community procedure, and, if necessary, any proceedings before the Court of Justice, have been completed.

These provisions, contained in the section of the Treaty headed 'Aids granted by States', are designed, on the one hand, to eliminate progressively existing aids and, on the other hand, to prevent the individual States in the conduct of their internal affairs from introducing new aids 'in any form whatsoever'

which are likely directly or indirectly to favour certain undertakings or products in an appreciable way, and which threaten, even potentially, to distort competition. By virtue of Article 92, the Member States have acknowledged that such aids are incompatible with the Common Market and have thus implicitly undertaken not to create any more, save as otherwise provided in the Treaty; in Article 93, on the other hand, they have merely agreed to submit themselves to appropriate procedures for the abolition of existing aids and the introduction of new ones.

By so expressly undertaking to inform the Commission 'in sufficient time' of any plans for aid, and by accepting the procedures laid down in Article 93, the States have entered into an obligation with the Community, which binds them as States but creates no individual rights except in the case of the final provision of Article 93 (3), which is not in question in the present case.

For its part, the Commission is bound to ensure respect for the provisions of this Article, and is required, in cooperation with Member States, to keep under constant review existing systems of aids. This obligation does not, however, give individuals the right to plead, within the framework of Community law and by means of Article 177, either failure by the State concerned to fulfil any of its obligations or breach of duty on the part of the Commission.

On the interpretation of Article 53

By Article 53 the Member States undertake not to introduce any new restrictions on the right of establishment in their territories of nationals of other Member States, save as otherwise provided in the Treaty. The obligation thus entered into by the States simply amounts legally to a duty not to act, which is neither subject to any conditions, nor, as regards its execution or effect, to the adoption of any measure either by the States or by the Commission. It is therefore legally complete in itself and is consequently capable of producing direct effects on the relations between Member States and individuals. Such an express prohibition which came into force with the Treaty throughout the Community, and thus became an integral part of the legal system of the Member States, forms part of the law of those States and directly concerns their nationals, in whose favour it has created individual rights which national courts must protect.

The interpretation of Article 53 which is sought requires that it be considered in the context of the Chapter relating to the right of establishment in which it occurs. After enacting in Article 52 that 'restrictions on the freedom of establishment of nationals of a Member State in the territory of another

Member State shall be abolished by progressive stages', this chapter goes on in Article 53 to provide that 'Member States shall not introduce any new restrictions on the right of establishment in their territories of nationals of other Member States'. The question is, therefore, on what conditions the nationals of other Member States have a right of establishment. This is dealt with by the second paragraph of Article 52, where it is stated that freedom of establishment shall include the right to take up and pursue activities as self-employed persons and to set up and manage undertakings 'under the conditions laid down for its own nationals by the law of the country where such establishment is effected'.

Article 53 is therefore satisfied so long as no new measure subjects the establishment of nationals of other Member States to more severe rules than those prescribed for nationals of the country of establishment, whatever the legal system governing the undertaking.

On the interpretation of Article 37

Article 37 (1) provides that Member States shall progressively adjust any 'State monopolies of a commercial character' so as to ensure that no discrimination regarding the conditions under which goods are procured and marketed exists between nationals of Member States. By Article 37 (2), the Member States are under an obligation to refrain from introducing any new measure which is contrary to the principles laid down in Article 37 (1).

Thus, Member States have undertaken a dual obligation: in the first place, an active one to adjust State monopolies, in the second place, a passive one to avoid any new measures. The interpretation requested is of the second obligation together with any aspects of the first necessary for this interpretation.

Article 37 (2) contains an absolute prohibition: not an obligation to do something but an obligation to refrain from doing something. This obligation is not accompanied by any reservation which might make its implementation subject to any positive act of national law. This prohibition is essentially one which is capable of producing direct effects on the legal relations between Member States and their nationals.

Such a clearly expressed prohibition which came into force with the Treaty throughout the Community, and so became an integral part of the legal system of the Member States, forms part of the law of those States and directly concerns their nationals, in whose favour it creates individual rights which

national courts must protect. By reason of the complexity of the wording and the fact that Articles 37 (1) and 37 (2) overlap, the interpretation requested makes it necessary to examine them as a part of the Chapter in which they occur. This Chapter deals with the 'elimination of quantitative restrictions between Member States'. The object of the reference in Article 37 (2) to 'the principles laid down in paragraph (1)' is thus to prevent the establishment of any new 'discrimination regarding the conditions under which goods are procured and marketed . . . between nationals of Member States'. Having specified the objective in this way, Article 37 (1) sets out the ways in which this objective might be thwarted in order to prohibit them.

Thus, by the reference in Article 37 (2), any new monopolies or bodies specified in Article 37 (1) are prohibited in so far as they tend to introduce new cases of discrimination regarding the conditions under which goods are procured and marketed. It is therefore a matter for the court dealing with the main action first to examine whether this objective is being hampered, that is whether any new discrimination between nationals of Member States regarding the conditions under which goods are procured and marketed results from the disputed measure itself or will be the consequence thereof.

There remain to be considered the means envisaged by Article 37 (1). It does not prohibit the creation of any State monopolies, but merely those 'of a commercial character', and then only in so far as they tend to introduce the cases of discrimination referred to. To fall under this prohibition the State monopolies and bodies in question must, first, have as their object transactions regarding a commercial product capable of being the subject of competition and trade between Member States, and secondly must play an effective part in such trade.

It is a matter for the court dealing with the main action to assess in each case whether the economic activity under review relates to such a product which, by virtue of its nature and the technical or international conditions to which it is subject, is capable of playing an effective part in imports or exports between nationals of the Member States.

Costs

The costs incurred by the Commission of the European Economic Community and the Italian Government, which have submitted observations to the Court, are not recoverable and as these proceedings are, in so far as the parties to the main action are concerned, a step in the action pending before the Giudice Conciliatore, Milan, the decision on costs is a matter for that court.

On those grounds,

Upon reading the pleadings;
Upon hearing the report of the Judge-Rapporteur;
Upon hearing the observations of the parties to the main action, the Commission of the European Economic Community and the Italian Government;
Upon hearing the opinion of the Advocate-General;
Having regard to Articles 37, 53, 93, 102 and 177 of the Treaty establishing the European Economic Community;
Having regard to the Protocol on the Statute of the Court of Justice of the European Economic Community;
Having regard to the Rules of Procedure of the Court of Justice of the European Communities;

THE COURT

Ruling upon the plea of inadmissibility based on Article 177 hereby declares:

As a subsequent unilateral measure cannot take precedence over Community law, the questions put by the Giudice Conciliatore, Milan, are admissible in so far as they relate in this case to the interpretation of provisions of the EEC Treaty;

and also rules:

1. **Article 102 contains no provisions which are capable of creating individual rights which national courts must protect;**

2. **Those individual portions of Article 93 to which the question relates equally contain no such provisions;**

3. **Article 53 constitutes a Community rule capable of creating individual rights which national courts must protect. It prohibits any new measure which subjects the establishment of nationals of other Member States to more severe rules than those prescribed for nationals of the country of establishment, whatever the legal system governing the undertakings.**

4. **Article 37 (2) is in all its provisions a rule of Community law**

capable of creating individual rights which national courts must protect. In so far as the question put to the Court is concerned, it prohibits the introduction of any new measure contrary to the principles of Article 37 (1), that is, any measure having as its object or effect a new discrimination between nationals of Member States regading the conditions in which goods are procured and marketed, by means of monopolies or bodies which must, first, have as their object transactions regarding a commercial product capable of being the subject of competition and trade between Member States, and secondly must play an effective part in such trade;

and further declares:

The decision on the costs of the present action is a matter for the Guidice Conciliatore, Milan.

Donner Hammes Trabucchi

Delvaux Rossi Lecourt Strauβ

Delivered in open court in Luxembourg on 15 July 1964.

A. Van Houtte
Registrar

A. M. Donner
President

OPINION OF MR ADVOCATE-GENERAL LAGRANGE DELIVERED ON 25 JUNE 1964[1]

Mr President,
Members of the Court,

The preliminary question upon which you have to give a ruling under Article 177 of the EEC Treaty does not, for once, come from a Netherlands court, but from an Italian one, and it is no longer a question of social security or of Regulation No 3, but rather of a certain number of provisions of the Treaty itself, in respect of which your interpretation is requested in circumstances that are such as to bring in issue the constitutional relations between the European Economic Community and its Member States. This highlights the importance of the judgment you are called upon to pronounce in this case. The facts are known to you: Mr Costa, a lawyer practising in Milan, claims that he is not under an obligation to pay an invoice amounting to 1925 lire demanded of him in respect of the supply of electricity by the 'Ente Nazionale per l'Energia Elettrica (ENEL)'. He objected to this

1—Translated from the French.

individuals were prevented from relying on it before the national courts and if the latter were prevented from taking it into consideration as an element of Community law. Article 177, which empowers national courts to refer to the Court questions concerning the validity and interpretation of all acts of the Community institutions, without distinction, implies furthermore that these acts may be invoked by individuals in the national courts.

It is necessary to examine in every case whether the nature, general scheme and wording of the provision in question are capable of having direct effects on the relations between Member States and individuals.

3. Article 3 (1) of Council Directive No 64/221 of 25 February 1964 on the coordination of special measures concerning the movement and residence of foreign nationals which are justified on grounds of public policy, public security or public health confers on individuals rights which are enforceable by them in the national courts of a Member State and which the latter must protect.

4. The concept of public policy in the context of the Community and where, in particular, it is used as a justification for derogating from a fundamental principle of Community law, must be interpreted strictly, so that its scope cannot be determined unilaterally by each Member State without being subject to control by the institutions of the Community. Nevertheless, the particular circumstances justifying recourse to the concept of public policy may vary from one country to another and from one period to another, and it is therefore necessary in this matter to allow the competent national authorities an area of discretion within the limits imposed by the Treaty.

5. Article 48 of the EEC Treaty and Article 3 (1) of Directive No 64/221 must be interpreted as meaning that a Member State, imposing restrictions justified on grounds of public policy, is entitled to take into account, as a matter of personal conduct of the individual concerned, the fact that the individual is associated with some body or organization the activities of which the Member State considers socially harmful but which are not unlawful in that State, despite the fact that no restriction is placed upon nationals of the said Member State who wish to take similar employment with the same bodies or organizations.

In Case 41/74

Reference to the Court under Article 177 of the EEC Treaty by the Chancery Division of the High Court of Justice, England, for a preliminary ruling in the action pending before that court between

YVONNE VAN DUYN

and

HOME OFFICE

on the interpretation of Article 48 of the EEC Treaty and Article 3 of Council Directive 64/221/EEC of 25 February 1964 on the coordination of special measures concerning the movement and residence of foreign nationals which are justified on grounds of public policy, public security or public health. (OJ of 4. 4. 1964, p. 850).

THE COURT

composed of: R. Lecourt, President C. Ó Dálaigh and Mackenzie Stuart, Presidents of Chambers A. M. Donner, R. Monaco, J. Mertens de Wilmars, P. Pescatore, H. Kutscher and M. Sørensen (Rapporteur), Judges.

Advocate-General: H. Mayras,
Registrar: A. Van Houtte,

gives the following

JUDGMENT

Facts

The order for reference and the written observations submitted pursuant to Article 20 of the Protocol on the Statute of the Court of Justice of the EEC may be summarized as follows:

I — Facts and procedure

1. The Church of Scientology is a body established in the United States of America, which functions in the United Kingdom through a college at East Grinstead, Sussex. The British Government regards the activities of the Church of Scientology as contrary to public policy. On 25 July 1968, the Minister of Health stated in the House of Commons that the Government was satisfied that Scientology was socially harmful. The statement included the following remarks: 'Scientology is a pseudo-philosophical cult ... The Government are satisfied having reviewed all the available evidence that Scientology is socially harmful. It alienates members of families from each other and attributes squalid and disgraceful motives to all who oppose it; its authoritarian principles and practice are a potential menace to the personality and well-being of those so deluded as to become its followers; above all its methods can be a serious danger to the health of those who submit to them. There is evidence that children are now being indoctrinated. There is no power under existing law to prohibit the practice of Scientology; but the Government have concluded that it is so objectionable that it would be right to take all steps within their power to curb its growth... Foreign nationals come here to study

Scientology and to work at the so-called College in East Grinstead. The Government can prevent this under existing law ... and have decided to do so. The following steps are being taken with immediate effect ...

.....

(e) Work permits and employment vouchers will not be issued to foreign nationals ... for work at a Scientology establishment.'

No legal restrictions are placed upon the practice of Scientology in the United Kingdom nor upon British nationals (with certain immaterial exceptions) wishing to become members of or take employment with the Church of Scientology.

2. Miss van Duyn is a Dutch national. By a letter dated 4 May 1973 she was offered employment as a secretary with the Church of Scientology at its college at East Grinstead. With the intention of taking up that offer she arrived at Gatwick Airport on 9 May 1973 where she was interviewed by an immigration officer and refused leave to enter the United Kingdom. It emerged in the course of the interview that she had worked in a Scientology establishment in Amsterdam for six months, that she had taken a course in the subject of Scientology, that she was a practising Scientologist and that she was intending to work at a Scientology establishment in the United Kingdom.

The ground of refusal of leave to enter which is stated in the document entitled 'Refusal of Leave to Enter' handed by the immigration officer to Miss van Duyn reads: 'You have asked for leave to enter the United Kingdom in order to take employment with The Church of Scientology, but the Secretary of State considers it undesirable to give anyone leave to enter the United Kingdom on the business of or in the employment of that organization'.

The power to refuse entry into the United Kingdom is vested in immigration officers by virtue of section 4 (1) of the Immigration Act 1971. Leave to enter was refused by the immigration officer acting in accordance with the policy of the Government and with Rule 65 of the relevant Immigration Rules for Control of Entry which Rules have legislative force. Rule 65 reads:

'Any passenger except the wife or child under 18 of a person settled in the United Kingdom may be refused leave to enter on the ground that the exclusion is conducive to the public good where —

(a) the Secretary of State has personally so directed, or

(b) from information available to the Immigration Officer it seems right to refuse leave to enter on that ground — if, for example, in the light of the passenger's character, conduct or associations it is undesirable to give him leave to enter.'

3. Relying on the Community rules on freedom of movement of workers and especially on Article 48 of the EEC Treaty, Regulation 1612/68 and Article 3 of Directive 64/221, [1] Miss van Duyn claims that the refusal of leave to enter was unlawful and seeks a declaration from the High Court that she is entitled to stay in the United Kingdom for the purpose of employment and to be given leave to enter the United Kingdom.

Before deciding further, the High Court has stayed the proceedings and requested the Court of Justice, pursuant to Article 177 of the EEC Treaty, to give a preliminary ruling on the following questions:

1. Whether Article 48 of the Treaty establishing the European Economic Community is directly applicable so as to confer on individuals rights enforceable by them in the Court of a Member State.

1 — Article 3 (1) of the Directive reads: 'Measures taken on grounds of public policy or of public security shall be based exclusively on the personal conduct of the individual concerned.'

2. Whether Directive 64/221 adopted on 25 February 1964 in accordance with the Treaty establishing the European Economic Community is directly applicable so as to confer on individuals rights enforceable by them in the Courts of a Member State.

3. Whether upon the proper interpretation of Article 48 of the Treaty establishing the European Economic Community and Article 3 of Directive 64/221/EEC a Member State in the performance of its duty to base a measure taken on grounds of public policy exclusively on the personal conduct of the individual concerned is entitled to take into account as matters of personal conduct

   (a) the fact that the individual is or has been associated with some body or organization the activities of which the Member State considers contrary to the public good but which are not unlawful in that State

   (b) the fact that the individual intends to take employment in the Member State with such a body or organization it being the case that no restrictions are placed upon nationals of the Member State who wish to take similar employment with such a body or organization.

4. The order of the High Court of 1 March 1974 was registered at the Court on 13 June 1974.

Written observations have been submitted on behalf of Miss van Duyn by Alan Newman, on behalf of the United Kingdom by W. H. Godwin and on behalf of the Commission by its Legal Adviser, A. McClellan.

Having heard the report of the Judge-Rapporteur and the opinion of the Advocate-General, the Court decided to open the oral procedure without any preparatory inquiry.

II — Written observations submitted to the Court

On the First Question

Miss van Duyn and the *Commission* submit that Article 48 of the EEC Treaty is directly applicable. They rely in particular on the judgments of the Court of 4 April 1974 in *Commission* v *French Republic* (Case No 167/73, [1974] ECR 359) and of 21 June 1974 in *Reyners* v *Belgian State* (Case No 2/74, not yet published).

In the light of the judgment in Case No 167/73 the *United Kingdom* makes no submission on this question.

On the Second Question

Miss van Duyn submits that Article 3 of Directive 64/221 is directly applicable. She observes that the Court has already held that, in principle, directives are susceptible of direct application. She refers to the judgments of the Court of 6 October 1970 in *Grad v Finanzamt Traunstein* (Case No 9/70, Recueil 1970, p. 825) and of 17 December 1970 in *Spa SACE* v *Italian Ministry of Finance* (Case No 33/70, Recueil 1970, p. 1213).

She submits that the criterion as to whether a directive is directly applicable is identical with the criterion adopted in the case of articles in the Treaty itself, and she observes that the Court has not felt itself constrained to hold that a given article in the Treaty is not directly applicable merely because in its formal wording it imposes an obligation on a Member State. She refers to the judgments of the Court of 19 December 1968 in *Salgoil* v *Italian Ministry* (Case No 13/68, Recueil 1968, p. 661) and of 16 June 1966 in *Lütticke GmbH* v *Hauptzollamt Sarrelouis* (Case No 57/65, Recueil 1966, p. 293).

Miss van Duyn further submits that a directive which directly affects an individual is capable of creating direct rights for that individual where its

provisions are clear and unconditional and where, as to the result to be achieved, it leaves no substantial measure of discretion to the Member State. Provided that these criteria are fulfilled it does not matter

(a) whether the provision in the directive consists of a positive obligation to act or of a negative prohibition, or

(b) that the Member State has a choice of form and methods to be adopted in order to achieve the stated result.

As to (a), it is implicit in the Court's judgments in the cases of *Lütticke* and *Salgoil* (already cited) that an article of the Treaty which imposes a positive obligation on a Member State to act is capable of direct applicability and the same reasoning is valid in relation to directives.

As to (b), she notes that Article 189 of the Treaty expressly draws a distinction in relation to directives between binding effect of the result to be achieved and the discretionary nature of the methods to be adopted.

She contends that the provisions of Article 3 fulfil the criteria for direct applicability. She refers to the preamble to the Directive which envisages a direct applicability when it states: 'whereas, in each Member State, nationals of other Member States should have adequate legal remedies available to them in respect of the administration in such matters . . .' (i.e. when a Member State invokes grounds of public policy, public security or public health in matters connected with the movement or residence of foreign nationals).

The only 'adequate legal remedy' available to an individual is the right to invoke the provisions of the Directive before the national courts. A decision to this effect would undoubtedly strengthen the legal protection of individual citizens in the national courts.

The Commission submits that a provision in a directive is directly applicable when it is clear and unambiguous. It refers to the judgments in the *Grad* and *SACE* cases (already cited).

The Commission observes that a Community Regulation has the same weight with immediate effect as national legislation whereas the effect of a directive is similar to that of those provisions of the Treaty which create obligations for the Member States. If provisions of a directive are legally clear and unambiguous, leaving only a discretion to the national authorities for their implementation, they must have an effect similar to those Treaty provisions which the Court has recognized as directly applicable.

It therefore submits that

(a) the executive of a Member State is bound to respect Community law

(b) if a provision in a directive is not covered by an identical provision in national law, but left, as to the result to be achieved, to the discretion of the national authority, the discretionary power of that authority is reduced by the Community provision

(c) in these circumstances and given that to comply with a directive it is not always indispensable to amend national legislation it is clear that the private individual must have the right to prevent the national authority concerned from exceeding its powers under Community law to the detriment of that individual.

According to the Commission, Article 3 is one of the provisions of Directive 64/221 having all the characteristics necessary to have direct effect in the Member State to which it is addressed. And it further recalls that the difficulty of applying the rules in a particular case does not derogate from their general application.

In this context the Commission examines the Judgment of 7 October 1968 of the Belgian Conseil d'État in the

Corveleyn case (CE 1968, No 13.146 arrêt 7. 10. 1968, p. 710).

As the British authorities have not adopted the wording of Article 3 of the Directive to achieve the required result, the Commission submits, by virtue of Article 189 of the Treaty and in the light of the case-law of the Court, that Article 3 is a directly applicable obligation which limits the wide discretion given to immigration officers under Rule 65 in the 'Statement of Immigration Rules'. The Commission proposes the following answer to the question: Where a provision is legally clear and unambiguous as is Article 3 of Directive 64/221, such a provision is directly applicable so as to confer on individuals rights enforceable by them in the Courts of a Member State.

The United Kingdom recalls that Article 189 of the EEC Treaty draws a clear distinction between regulations and directives, and that different effects are ascribed to each type of provision. It therefore submits that prima facie the Council in not issuing a regulation must have intended that the Directive should have an effect other than that of a regulation and accordingly should not be binding in its entirety and not be directly applicable in all Member States.

The United Kingdom submits that neither the *Grad* nor the *SACE* decision is authority for the proposition that it is immaterial whether or not a provision is contained in a regulation, directive or decision. In both cases the purpose of the directive in question was merely to fix a date for the implementation of clear and binding obligations contained in the Treaty and instruments made under it. Those cases show that in special circumstances a limited provision in a directive could be directly applicable. The provisions of the Directive in the present case are wholly different. Directive 64/221 is far broader in scope. It gives comprehensive guidance to Member States as to all measures taken by them affecting freedom of movement for workers and it was expressly contemplated in Article 10 that Member States would put into force the measures necessary to comply with the provisions of the Directive. Indeed the very terms of Article 3 (1) itself contemplate the taking of measures.

The United Kingdom examines the only four cases in which national courts to its knowledge have considered the question of the direct applicability of the Directive. It submits that little assistance can be obtained from these cases. *Inter alia* it points out that the true effect of the *Corveleyn* case (already cited) has been the subject of considerable debate among Belgian jurists and the better view appears to be that the Conseil d'État did not decide that the Directive was directly applicable but applied the Belgian concept of public order which itself required international obligations of Belgium to be taken into account.

On the Third Question

Miss van Duyn points out that the first part of the question assumes a situation where an organization engages in activities which are lawful in the State. The question does not necessarily assume that the individual concerned intends to continue this association. It is sufficient that he has in the past been associated. In this respect Miss van Duyn recalls that even if the individual had been associated with an illegal organization and, by virtue of his activities therein, had been convicted of a crime, that circumstance would not, by virtue of the provisions of Article 3, paragraph 2, of Directive 64/221, in itself be sufficient grounds for the Member State to take measures based on public policy to exclude the individual.

Merely belonging to a lawful organization, without necessarily taking part in its activities, cannot, in her submission, amount to 'conduct'. Conduct implies 'activity.' Moreover, the activities of the organization in question are not, merely because the individual is or has been a passive member, 'personal' to the individual concerned. To hold

otherwise would mean that a Member State could exclude an individual merely because, in the distant past, he had for a brief period perfectly lawfully belonged to a somewhat extreme political or religious organization in his own Member State.

In regard to the second part of the question, Miss van Duyn recalls that freedom of movement of persons is one of the fundamental principles established by the Treaty and that discrimination on grounds of nationality is prohibited in Article 7. Exemptions to these fundamental principles must be interpreted restrictively.

She points out that the question assumes discrimination on grounds of nationality and that it assumes a situation where an individual whose past activity has been blameless seeks entry into a Member State in order to work for an organization in whose employment the nationals of the Member State are prefectly free to engage. She submits that if an organization is deemed contrary to the public good the Member State is faced with a simple choice: either to ban everyone, including its own nationals, from engaging in employment with that organization, or to tolerate nationals of other Member States as it tolerates its own nationals engaging in such employment.

The Commission asserts that the concepts 'public policy' and 'personal conduct' contained in Article 48, paragraph 3 of the Treaty and Article 3 of Directive 64/221 are concepts of Community law. The must first be interpreted in the context of Community law and national criteria are only relevant to its application.

In practice, if each Member State could set limits to the interpretation of public policy the obligations deriving from the principle of freedom of movement of workers would take a variety of forms in different Member States. It is only possible for this freedom to be maintained throughout the Community on the basis of uniform application in all the Member States. It would be inconsistent with the Treaty if one Member State accepted workers from another Member State while its own workers did not receive uniform treatment as regards the application of the rules in respect of public order in that other State.

The Commission submits that the discrimination by a Member State on grounds of public policy against nationals of another Member State for being employed by an organization the activities of which it considers contrary to the public good when it does not make it unlawful for its own nationals to be employed by such organization is contrary to Article 48, paragraph 2 of the Treaty. Article 3 (1) of the Directive is precise in stating that measures taken on grounds of public policy shall be based exclusively on the personal conduct of the individual concerned. Personal conduct which is acceptable when exercised by a national of one Member State cannot be unacceptable, under Community law, when exercised by a national of another Member State.

It is for consideration that Article 3 precludes a Member State, as a general contingency against some potential harm to society, from invoking public policy as a ground for refusing entry when the personal conduct of the individual is or was not contrary to public policy in the Member States concerned. It is not denied that membership of a militant organization proscribed in the host Member State would be an element to be taken into account in assessing personal conduct for the purpose of justifying a refusal of entry on grounds of public policy or public security.

As to the first part of the question *the United Kingdom* deals with three problems.

The first problem is whether an individual's past or present association with an organization can be regarded as an aspect of his personal conduct. The United Kingdom asserts that it is of importance that a Member State in

relation to public policy should be entitled to consider a person's associations with a body or organization. The Member State should be entitled to exclude that person in appropriate cases, i.e. if the organization is considered sufficiently undesirable from the viewpoint of public policy and the association by that person with that organization is sufficiently close.

Secondly the United Kingdom submits that a measure which is taken on grounds of public policy and which provides for the exclusion from a Member State of an individual on the grounds of that individual's association with an organization is compatible with the requirement of Article 3 (1). It accepts that the intention underlying that Article must have been to exclude collective expulsions and to require the consideration by the national authorities of the personal circumstances of each individual in each case. Nevertheless it is not inconsistent with that intention for a Member State to take into account an individual's association with an organization and, in appropriate cases, to exclude the individual by reason of that association. Whether, in any given case, such exclusion is justified will depend on the view the Member State takes of the organization.

As a practical matter the processes of admitting persons to enter a Member State must be administered by a large number of officials. Such officials cannot be expected to know all that the Government may know about a particular organization and it is inevitable that such officials must act in accordance with directions given by the Government and laying down broad principles on which the officials are to act. It is inevitable also that such directions may relate to particular organizations which a Government may consider contrary to the public good.

Thirdly the United Kingdom submits that the fact that the activities of the organization are not unlawful in a Member State though considered by the Member State to be contrary to the public good does not disentitle the Member State from taking into account the individual's association with the organization. It must be a matter for each State to decide whether it should make activities of an organization, or the organization itself, illegal. Only the State is competent to make such evaluation and it will do so in the light of the particular circumstances of that State. Thus, as is common knowledge, the United Kingdom practises a considerable degree of tolerance in relation to organizations within the United Kingdom. In the case of Scientology the reasons why the United Kingdom regards the activities of the Scientologists as contrary to public policy were explained in the statement made in Parliament on 25 July 1968. The Scientologists still have their World Headquarters in the United Kingdom so that Scientology is of particular concern to the United Kingdom.

The United Kingdom notes that two problems arise in connection with the matter referred to in subparagraph (b) of the question.

The first problem is whether the fact that an individual intends to take employment with such an organization is an aspect of that individual's personal conduct. It is submitted that such an intention is a very material aspect of the individual's personal conduct.

The second problem is whether the fact that no restrictions are placed upon nationals of the Member State who wish to take similar employment with such an organization disentitles the Member State from taking this intention into account.

The United Kingdom points out that it is inevitable that in respect of the entry into a state of persons, there must be some discrimination in favour of the nationals of that state. For a national, however undesirable and potentially harmful his entry may be, cannot be refused admission into his own state. A state has a duty under international law

to receive back its own nationals. The United Kingdom refers *inter alia* to Article 5 (b) (ii) of the Universal Declaration of Human Rights which states: 'Everyone has the right to leave any country, including his own, and to return to his country'. It observes that, for example, a Member State would be justified in refusing to admit a drug addict who is a national of another State even though it would be obliged to admit a drug addict who was one of its own nationals.

Miss van Duyn, represented by Alan Newman, the United Kingdom, represented by Peter Gibson, and the Commission, represented by Anthony McClellan, submitted oral observations at the hearing on 23 October 1974.

The Advocate-General delivered his opinion at the hearing on 13 November 1974.

Law

1 By order of the Vice-Chancellor of 1 March 1974, lodged at the Court on 13 June, the Chancery Division of the High Court of Justice of England, referred to the Court, under Article 177 of the EEC Treaty, three questions relating to the interpretation of certain provisions of Community law concerning freedom of movement for workers.

2 These questions arise out of an action brought against the Home Office by a woman of Dutch nationality who was refused leave to enter the United Kingdom to take up employment as a secretary with the 'Church of Scientology'.

3 Leave to enter was refused in accordance with the policy of the Government of the United Kingdom in relation to the said organization, the activities of which it considers to be socially harmful.

First question

4 By the first question, the Court is asked to say whether Article 48 of the EEC Treaty is directly applicable so as to confer on individuals rights enforceable by them in the courts of a Member State.

5 It is provided, in Article 48 (1) and (2), that freedom of movement for workers shall be secured by the end of the transitional period and that such freedom shall entail 'tha abolition of any discrimination based on nationality between workers of Member States as regards employment, remuneration and other conditions of work and employment.'

6 These provisions impose on Member States a precise obligation which does not require the adoption of any further measure on the part either of the Community institutions or of the Member States and which leaves them, in relation to its implementation, no discretionary power.

7 Paragraph 3, which defines the rights implied by the principle of freedom of movement for workers, subjects them to limitations justified on grounds of public policy, public security or public health. The application of these limitations is, however, subject to judicial control, so that a Member State's right to invoke the limitations does not prevent the provisions of Article 48, which enshrine the principle of freedom of movement for workers, from conferring on individuals rights which are enforceable by them and which the national courts must protect.

8 The reply to the first question must therefore be in the affirmative.

Second question

9 The second question asks the Court to say whether Council Directive No 64/221 of 25 February 1964 on the co-ordination of special measures concerning the movement and residence of foreign nationals which are justified on grounds of public policy, public security or public health is directly applicable so as to confer on individuals rights enforceable by them in the courts of a Member State.

10 It emerges from the order making the reference that the only provision of the Directive which is relevant is that contained in Article 3 (1) which provides that 'measures taken on grounds of public policy or public security shall be based exclusively on the personal conduct of the individual concerned.'

11 The United Kingdom observes that, since Article 189 of the Treaty distinguishes between the effects ascribed to regulations, directives and decisions, it must therefore be presumed that the Council, in issuing a directive rather than making a regulation, must have intended that the directive should have an effect other than that of a regulation and accordingly that the former should not be directly applicable.

12 If, however, by virtue of the provisions of Article 189 regulations are directly applicable and, consequently, may by their very nature have direct effects, it does not follow from this that other categories of acts mentioned in that Article can never have similar effects. It would be incompatible with the binding effect attributed to a directive by Article 189 to exclude, in principle, the possibility that the obligation which it imposes may be invoked by those concerned. In particular, where the Community authorities have, by directive, imposed on Member States the obligation to pursue a particular course of conduct, the useful effect of such an act would be weakened if individuals were prevented from relying on it before their national courts and if the latter were prevented from taking it into consideration as an element of Community law. Article 177, which empowers national courts to refer to the Court questions concerning the validity and interpretation of all acts of the Community institutions, without distinction, implies furthermore that these acts may be invoked by individuals in the national courts. It is necessary to examine, in every case, whether the nature, general scheme and wording of the provision in question are capable of having direct effects on the relations between Member States and individuals.

13 By providing that measures taken on grounds of public policy shall be based exclusively on the personal conduct of the individual concerned, Article 3 (1) of Directive No 64/221 is intended to limit the discretionary power which national laws generally confer on the authorities responsible for the entry and expulsion of foreign nationals. First, the provision lays down an obligation which is not subject to any exception or condition and which, by its very nature, does not require the intervention of any act on the part either of the institutions of the Community or of Member States. Secondly, because Member States are thereby obliged, in implementing a clause which derogates from one of the fundamental principles of the Treaty in favour of individuals, not to take account of factors extraneous to personal conduct, legal certainty for the persons concerned requires that they should be able to rely on this obligation even though it has been laid down in a legislative act which has no automatic direct effect in its entirety.

14 If the meaning and exact scope of the provision raise questions of interpretation, these questions can be resolved by the courts, taking into account also the procedure under Article 177 of the Treaty.

15 Accordingly, in reply to the second question, Article 3 (1) of Council Directive No 64/221 of 25 February 1964 confers on individuals rights which are enforceable by them in the courts of a Member State and which the national courts must protect.

Third question

16 By the third question the Court is asked to rule whether Article 48 of the Treaty and Article 3 of Directive No 64/221 must be interpreted as meaning that

'a Member State, in the performance of its duty to base a measure taken on grounds of public policy exclusively on the personal conduct of the individual concerned is entitled to take into account as matters of personal conduct:

(a) the fact that the individual is or has been associated with some body or organization the activities of which the Member State considers contrary to the public good but which are not unlawful in that State;

(b) the fact that the individual intends to take employment in the Member State with such a body or organization it being the case that no restrictions are placed upon nationals of the Member State who wish to take similar employment with such a body or organization.'

17 It is necessary, first, to consider whether association with a body or an organization can in itself constitute personal conduct within the meaning of Article 3 of Directive No 64/221. Although a person's past association cannot in general, justify a decision refusing him the right to move freely within the Community, it is nevertheless the case that present association, which reflects participation in the activities of the body or of the organization as well as identification with its aims and its designs, may be considered a voluntary act of the person concerned and, consequently, as part of his personal conduct within the meaning of the provision cited.

18 This third question further raises the problem of what importance must be attributed to the fact that the activities of the organization in question, which are considered by the Member State as contrary to the public good are not however prohibited by national law. It should be emphasized that the concept of public policy in the context of the Community and where, in particular, it is used as a justification for derogating from the fundamental principle of freedom of movement for workers, must be interpreted strictly, so that its scope cannot be determined unilaterally by each Member State without being subject to control by the institutions of the Community. Nevertheless, the particular circumstances justifying recourse to the concept of public policy may vary from one country to another and from one period to another, and it is therefore necessary in this matter to allow the competent national authorities an area of discretion within the limits imposed by the Treaty.

19 It follows from the above that where the competent authorities of a Member State have clearly defined their standpoint as regards the activities of a particular organization and where, considering it to be socially harmful, they have taken administrative measures to counteract these activities, the Member State cannot be required, before it can rely on the concept of public policy, to make such activities unlawful, if recourse to such a measure is not thought appropriate in the circumstances.

20 The question raises finally the problem of whether a Member State is entitled, on grounds of public policy, to prevent a national of another Member State from taking gainful employment within its territory with a body or organization, it being the case that no similar restriction is placed upon its own nationals.

21 In this connexion, the Treaty, while enshrining the principle of freedom of movement for workers without any discrimination on grounds of nationality, admits, in Article 48 (3), limitations justified on grounds of public policy, public security or public health to the rights deriving from this principle. Under the terms of the provision cited above, the right to accept offers of employment actually made, the right to move freely within the territory of Member States for this purpose, and the right to stay in a Member State for the purpose of employment are, among others all subject to such limita-

tions. Consequently, the effect of such limitations, when they apply, is that leave to enter the territory of a Member State and the right to reside there may be refused to a national of another Member State.

22 Furthermore, it is a principle of international law, which the EEC Treaty cannot be assumed to disregard in the relations between Member States, that a State is precluded from refusing its own nationals the right of entry or residence.

23 It follows that a Member State, for reasons of public policy, can, where it deems, necessary, refuse a national of another Member State the benefit of the principle of freedom of movement for workers in a case where such a national proposes to take up a particular offer of employment even though the Member State does not place a similar restriction upon its own nationals.

24 Accordingly, the reply to the third question must be that Article 48 of the EEC Treaty and Article 3 (1) of Directive No 64/221 are to be interpreted as meaning that a Member State, in imposing restrictions justified on grounds of public policy, is entitled to take into account, as a matter of personal conduct of the individual concerned, the fact that the individual is associated with some body or organization the activities of which the Member State considers socially harmful but which are not unlawful in that State, despite the fact that no restriction is placed upon nationals of the said Member State who wish to take similar employment with these same bodies or organizations.

Costs

25 The costs incurred by the United Kingdom and by the Commission of the European Communities, which have submitted observations to the Court, are not recoverable, and as these proceedings are, insofar as the parties to the main action are concerned, a step in the action pending before the national court, costs are a matter for that court.

On those grounds,

THE COURT

in answer to the questions referred to it by the High Court of Justice, by order of that court, dated 1 March 1974, hereby rules:

1. **Article 48 of the EEC Treaty has a direct effect in the legal orders of the Member States and confers on individuals rights which the national courts must protect.**

2. **Article 3 (1) of Council Directive No 64/221 of 25 February 1964 on the coordination of special measures concerning the movement and residence of foreign nationals which are justified on grounds of public policy, public security or public health confers on individuals rights which are enforceable by them in the national courts of a Member State and which the national courts must protect.**

3. **Article 48 of the EEC Treaty and Article 3 (1) of Directive No 64/221 must be interpreted as meaning that a Member State, in imposing restrictions justified on grounds of public policy, is entitled to take into account as a matter of personal conduct of the individual concerned, the fact that the individual is associated with some body or organization the activities of which the Member State considers socially harmful but which are not unlawful in that State, despite the fact that no restriction is placed upon nationals of the said Member State who wish to take similar employment with the same body or organization.**

Lecourt Ó Dálaigh Mackenzie Stuart Donner Monaco

Mertens de Wilmars Pescatore Kutscher Sørensen

Delivered in open court in Luxembourg on 4 December 1974.

A. Van Houtte
Registrar

R. Lecourt
President

at issue are not strictly identical. However, it must not be forgotten that in all such circumstances national courts and tribunals, including those referred to in the third paragraph of Article 177, remain entirely at liberty to bring a matter before the Court of Justice if they consider it appropriate to do so.

5. The third paragraph of Article 177 of the EEC Treaty is to be interpreted as meaning that a court or tribunal against whose decisions there is no judicial remedy under national law is required, where a question of Community law is raised before it, to comply with its obligation to bring the matter before the Court of Justice, unless it has established that the correct application of Community law is so obvious as to leave no scope for any reasonable doubt. The existence of such a possibility must be assessed in the light of the specific characteristics of Community law, the particular difficulties to which its interpretation gives rise and the risk of divergences in judicial decisions within the Community.

In Case 283/81

REFERENCE to the Court under Article 177 of the EEC Treaty by the First Civil Division of the Corte Suprema di Cassazione [Supreme Court of Cassation] for a preliminary ruling in the proceedings pending before that court

SRL CILFIT — in liquidation — and 54 Others, Rome,

v

MINISTRY OF HEALTH, in the person of the Minister, Rome,

and

LANIFICIO DI GAVARDO SPA, Milan,

v

MINISTRY OF HEALTH, in the person of the Minister, Rome,

on the interpretation of the third paragraph of Article 177 of the EEC Treaty,

THE COURT

composed of: J. Mertens de Wilmars, President, G. Bosco, A. Touffait and O. Due (Presidents of Chambers), P. Pescatore, Lord Mackenzie Stuart, A. O'Keeffe, T. Koopmans, U. Everling, A. Chloros and F. Grévisse, Judges,

Advocate General: F. Capotorti
Registrar: P. Heim

gives the following

JUDGMENT

Facts and issues

I — Facts and procedure

By a summons served on the Italian Minister for Health on 18 September 1974, the plaintiffs in the main proceedings, which are textile firms, contended that since the adoption of Law No 30 of 30 January 1968 they had paid, by way of fixed health inspection levy, LIT 700 per quintal of imported wool, until the entry into force of Law No 1239 of 30 December 1970, which amended the levy, although they should have been required to pay only a sum of LIT 70 per quintal "according to the correct interpretation of the Law of 30 January 1968 and, in any event, according to the authentic interpretation of that law given by Law No 1239 of 1970".

After the Tribunal di Roma [District Court, Rome] had dismissed their applications by judgment of 27 October 1976, the plaintiffs in the main proceedings lodged an appeal based on the argument rejected by the Tribunale. They also contended that Law No 1968 was inapplicable as a result of the adoption of Regulation (EEC) No 827/68 of the Council of 28 June 1968 on the common organization of the market in certain products listed in Annex II to the Treaty (Official Journal, English Special Edition 1968 (I) p. 209).

By judgment of 12 December 1978, the Corte d'Appello [Court of Appeal], Rome, rejected all the submissions relied upon by the plaintiffs and accepted the Ministry of Health's argument concerning the compatibility of Law No 30 of 1968 with the aforesaid regulation.

On 4 October 1979, the plaintiff in the main proceedings appealed against that judgment. In support of its submission that the appeal should be dismissed, the Ministry of Health, sharing the view held by the Court of Appeal, argued that since wool is not included in Annex II to the EEC Treaty, it is not subject to the common organization of the markets and cannot therefore come within the scope of the regulation in question.

The Ministry of Health urged the Court of Cassation to "decide the case along the lines suggested on the ground that the factual circumstances are so obvious as to rule out the possibility of their being capable of any other interpretation and that obviates the need to refer the matter for a preliminary ruling to the Court of Justice of the European Communities".

The Court of Cassation took the view that counsel for the Ministry of Health had raised a question concerning the interpretation of Article 177 of the Treaty in so far as he contended that that provision must be understood as meaning that the Court of Cassation, against whose decisions there is no judicial remedy under national law, is not obliged to refer a matter to the Court of Justice "when the solution of a question on the interpretation of acts performed by the Community institutions is so obvious as to preclude the very possibility of their being open to another interpretation".

Therefore the Court of Cassation, by order of 27 March 1981, stayed the proceedings and submitted to the Court of Justice a reference for a preliminary ruling on the following question:

"Does the third paragraph of Article 177 of the EEC Treaty, which provides that where any question of the same kind as those listed in the first paragraph of that article is raised in a case pending before a national court or tribunal against whose decisions there is no judicial remedy under national law that court or tribunal must bring the matter before the Court of Justice, lay down an obligation so to submit the case which precludes the national court from determining whether the question raised is justified or does it, and if so within what limits, make that obligation conditional on the prior finding of a reasonable interpretative doubt?"

The order making the reference was registered at the Court on 30 October 1981.

In accordance with Article 20 of the Protocol on the Statute of the Court of Justice of the EEC, written observations were submitted by the plaintiffs in the main proceedings, represented by G. Scarpa, G. Stella Richter, G. M. Ubertazzi and F. Capelli; by the Government of the Kingdom of Denmark, represented by its Legal Adviser, Laurids Mikaelsen, acting as Agent; by the Government of the Italian Republic, represented by S. Laporta, Avvocato dello Stato, and by A. Squillante, acting as Agent; and by the Commission of the European Communities, represented by G. Olmi, Deputy Director General, and Miss Mary Minch, a member of the Commission's Legal Department, acting as Agents.

On hearing the report of the Judge-Rapporteur and the views of the Advocate General, the Court decided to open the oral procedure without any preparatory inquiry.

II — Observations submitted pursuant to Article 20 of the Protocol on the Statute of the Court of Justice

A — Observations of the plaintiffs in the main proceedings

The *plaintiffs in the main proceedings* define the problem raised in the question submitted by the national court and express the view that it is concerned solely with the following three points:

"Does the obligation to make a reference for a preliminary ruling depend on a decision of the court hearing the case which establishes that the question raised before it is concerned with the interpretation rather than the application of Community law?

Must the Court of Cassation seek a ruling on interpretation from the Court of Justice even though the matter is not in any doubt?

Irrespective of the clarity of the text, must the question of interpretation appear *prima facie* to be substantially justified, fair and plausible?"

(a) Questions concerning interpretation and questions concerning application

The plaintiffs observe that the EEC Treaty is concerned only with questions of interpretation; therefore, the courts referred to in the third paragraph of Article 177 are required to make a reference for a preliminary ruling only in respect of such questions. Thus it is for those courts to determine beforehand whether the question raised before them is concerned with interpretation or rather with application.

However, in disputes brought before them national courts must apply Community law and it is for that purpose that they may refer questions concerning its interpretation to the Court of Justice.

Thus any doubts concerning the application of Community law relate above all to its interpretation with the result that the court would have to look beyond the external appearance of the question raised by the parties regarding the application of Community law "and discover the underlying question of interpretation".

(b) Must the Court of Cassation seek a ruling on interpretation from the Court even though the matter is not in any doubt?

The plaintiffs consider, in the first place, that under national law the maxim *in claris non fit interpretatio* "does not authorize the court to confine itself to the apparent meaning of a provision, on the basis of its literal purport", but implies that "if a provision is clear and unequivocal and there is no possible scope for divergence between the letter and the spirit, then (and only then) is an interpretation other than that suggested by the wording of the provision prohibited".

Next, the plaintiffs maintain that the rules of interpretation of classical international law which enable the principle of the *acte clair* to be applied should not be followed in Community law on the ground that Community law is a legal system in evolution and should be interpreted in a sense "which transcends the wording of the various specific provisions" and is therefore teleological, thus ensuring that the system is effectively applied.

Furthermore, the expressions used in legislation are not sufficiently clear to eliminate the risk of differing interpretations, especially since in the case of Community law the national court has to

overcome numerous difficulties resulting from the technical nature thereof, from the fact that the national court does not always have access to all the sources which make up the Community legal system and from the uncertainties "due to the sometimes complex interaction of national law and Community law".

In view of those difficulties, the courts referred to in the third paragraph of Article 177 are under an obligation to make a reference "whenever the interpretation of a Community provision is necessary, even though the meaning is apparently clear".

(c) Must the question of interpretation appear *prima facie* to be substantially justified, fair and plausible?

The last paragraph of Article 177 requires courts of last instance to bring a matter before the Court of Justice "if and only if 'a question' is raised before them".

The word "question" should be understood in the broad sense, that is to say not necessarily as referring to a disagreement between the parties but as meaning that an interpretative doubt in a case constitutes a necessary and sufficient condition for creating an obligation to make a reference to the Court of Justice.

However, the purpose of the question submitted by the Court of Cassation is not so much to ascertain the meaning of the term in question as to determine whether it is "reasonable" to use it. One answer may be obtained from the wording of the third paragraph of Article 177 "which makes no distinction between questions which are reasonable and those which are not".

A comparative study of the second and third paragraphs of Article 177 lends weight to that initial answer since both those provisions lead to the adoption of an interpretation designed to widen the obligation to make a reference, in other words to deprive the national court or tribunal referred to in the third paragraph of any discretion.

That argument is also supported by the objective of Article 177, which is to ensure the uniform application of Community law in the Member States, especially since that objective is constantly growing in importance and since the task of the Court of Cassation is, *inter alia*, to ensure "that the law is uniformly applied".

Moreover, the decisions of the Court of Justice are also consistent with a broad interpretation of Article 177; in particular in its judgment of 27 March 1963 in Joined Cases 28 to 30/62 *Da Costa en Schaake* [1963] ECR 31, the Court held that "the third paragraph of Article 177 unreservedly requires courts or tribunals of a Member State against whose decisions there is no judicial remedy under national law . . . to refer to the Court every question of interpretation raised before them".

That view is endorsed by leading academic lawyers and finally, as regards judicial policy, there would be a "serious risk" in allowing national supreme courts to determine whether questions raised before them are reasonable, inasmuch as they might inhibit or distort the process of integration between Community law and national law. To allow national supreme courts such a discretion would

also involve "the risk of creating an atmosphere of tension between national courts and Community institutions" and might promote discord.

B — Observations of the Italian Government

After outlining the facts of the case, the *Italian Government* observes that it stated before the Court of Cassation that there was in the present case "a factual circumstance so clear and so important as to preclude the very possibility of there being any interpretative doubt, thus making it unnecessary to refer the matter for a preliminary ruling to the Court of Justice of the European Communities".

The Italian Government considers that, in spite of the differences in the wording of the second and third paragraphs of Article 177, the third paragraph is no different "in scope and that consequently the purpose of that provision is not to deprive the national court of last instance of the power to determine whether a preliminary ruling is necessary".

The authors of the Treaty considered it appropriate to provide for a filter for questions of interpretation which might be submitted to the Court, as is shown by the retention of the ordinary procedure for making a reference to the Court even in proceedings before the national court of last instance.

Furthermore, when the Court of Justice stated in the *Da Costa en Schaake* judgment cited above that the obligation imposed by the third paragraph of Article 177 upon national courts or tribunals of last instance may be deprived of its purpose and emptied of its substance by the authority of an interpretation given by the Court in an earlier preliminary ruling in a similar case, it recognized that a national court of last instance is empowered to define the scope of the proceedings and thus to disclaim jurisdiction over a question or problem of interpretation concerning Community law by relying on the answer given by the Court to the same question.

Since Community law forms part of the legal system of each of the Member States "it would be absurd to take the view that a national court is prohibited from interpreting a provision which it is nevertheless obliged to apply". That consideration disposes of the argument that the national court of last instance must confine itself to taking note of the existence of arguments put forward by the parties which are based on Community law and referring them to the Court of Justice for scrutiny. That court must therefore formulate a question which is capable of being referred to the Court of Justice and, to that end, it must determine whether an interpretative doubt actually exists; that is supported by the opinion of Mr Advocate General Lagrange in the *Da Costa en Schaake* case (cited above), in which he pointed out that "before the procedure of referring a question for a preliminary ruling on interpretation can be set in motion, there must clearly be a question".

Thus, according to the Italian Government, a provision may be described as "clear" not only when it has already been interpreted by the Court of Justice in connection with a related question but also "when it cannot reasonably have more than one meaning having regard to its letter and context".

In the Italian Government's opinion, it seems highly improbable that the national court of last instance has, in Community matters, been divested of

some of its conventional instruments of interpretation and must therefore restrict itself exclusively to the letter of a provision in order to determine whether or not the meaning is obscure, whilst refraining *a priori* from considering any lingering doubts merely by comparing the results of a literal interpretation with those which a logical and systematic interpretation would yield.

Therefore it must be acknowledged that the provisions of Article 177 imply the need for an effective filter for the reference of questions of interpretation to the Court. It necessarily follows that the national court of last instance must give proper consideration to the question whether or not a genuine doubt exists.

It remains to define the limits of the court's discretion in this matter. The question is more complex in theory than it is in practice, at least at the present stage of development of Community law and given the degree of "Community awareness" attained in each of the Member States. Furthermore, the objective embodied in Article 177 of achieving a uniform interpretation of Community law and "the notion that any resistance will ultimately be overcome by the force of law" raise the question of the extent to which in practice a national court of last instance may deny in good faith the existence of a genuine preliminary question.

The Italian Government therefore proposes that the answer to the question submitted should be "that the EEC Treaty requires national courts of last instance to seek a preliminary ruling from the Court of Justice in cases in which, after due consideration, they recognize that the question of interpretation raised before them is not manifestly unfounded".

C — Observations of the Danish Government

After describing the objective of Article 177 and the way in which it operates the *Danish Government* expresses the view that the third paragraph of that article "cannot be understood as meaning that a national court against whose decisions there is no judicial remedy must refer to the Court of Justice any question concerning the interpretation or validity of a provision of Community law merely because the parties wish it to do so".

Such an approach would transform that article into a remedy available to private individuals, which is by no means the purpose of that provision.

It is clear from the Court's judgment of 22 November 1978 in Case 93/78 *Matthews* ([1978] ECR 2203) that "national courts are under an obligation to determine whether it is necessary to make a reference to the Court of Justice of the European Communities". Accordingly, it is for the national court to decide whether a doubt really exists which justifies referring a question to the Court of Justice for a preliminary ruling; that view is supported by the Court's judgment of 16 December 1981 in Case 244/80 *Foglia* v *Novello* ([1981] ECR 3045).

Next, the Danish Government, like the Italian Government, maintains that the decisions of the Court, in particular the *Da Costa en Schaake* judgment cited above, reaffirm that the obligation to make a reference to the Court of Justice for a preliminary ruling, as provided for

by the third paragraph of Article 177, is not an absolute one.

The Danish Government observes that even where there are no previous decisions by the Court, the national court may none the less decide a point directly, without requesting a preliminary ruling, if the provision of Community law at issue does not give rise to any difficulties of interpretation.

With regard to the theory of the *acte clair,* the Danish Government recalls that the Commission, in reply to Written Question No 608/78 (Official Journal 1979, C 28 pp. 8 and 9) stated that the courts "may decline to make a reference and decide the matter themselves in cases where such questions are perfectly straightforward and the answer is obvious to any lawyer with a modicum of experience".

The Danish Government informs the Court that the above criterion is also applied by the Danish courts, including courts of last instance.

It observes that, in its opinion, "a theoretical interpretative doubt does not in itself justify systematic recourse to the procedure for obtaining a preliminary ruling. For that, there must be a genuine interpretative doubt".

If, however, the *acte clair* test is to be adopted it must be applied with caution and the national supreme court must take a number of factors into account, especially as the provisions of Community law are drafted in several languages and the aim of Article 177 is to ensure the uniform application of Community law. In conclusion, therefore, that national court may not, on its own authority, set aside a Community measure which it regards as unlawful; similarly, it may not discard an interpretation previously adopted by the Court of Justice.

The Danish Government therefore proposes that the Court should give the following answer to the question referred to it:

"National courts against whose decisions there is no judicial remedy are under an obligation to refer to the Court of Justice of the European Communities for a preliminary ruling questions on the validity or interpretation of Community law if they consider that a decision on the question is necessary to enable them to give judgment in a particular case. It is neither necessary nor sufficient, for the purposes of that obligation, for a party to make a request to that effect. However, a court against whose decisions there is no judicial remedy and whose authority is such that its decisions are capable of constituting precedents must, for reasons based on the need to apply Community law in a uniform manner, avoid resolving such questions itself wherever possible".

D — Observations of the Commission

As a preliminary remark, the *Commission* expresses the view that the question submitted to the Court of Justice by the Italian Supreme Court of Cassation "is fundamental".

In the first place, the Commission relies on the theory of the *acte clair* which states that "there must be a genuine difficulty, raised by the parties or perceived by the Court itself, such as to insinuate a doubt into an alert mind"; it

also refers to a similar concept which exists in Italy and in the Federal Republic of Germany regarding the obligation on the part of courts to refer to the constitutional court questions relating to the constitutionality of national legislation. The position in Italy and in the Federal Republic of Germany is that "a court is not obliged to refer a matter to the constitutional court if it considers that the grounds relied upon before it for declaring a measure unconstitutional are manifestly devoid of all substance".

Next, after examining the principal arguments for and against the view that a court of last instance has a margin of discretion in relation to Community law, the Commission considers that such a view is acceptable under Community law.

In this connection it recalls that in its reply to Written Question No 608/78 by Mr Krieg (Official Journal 1979 C 28) it has already stated that in its opinion:

"National courts are not required, under Article 177 of the EEC Treaty, to stay proceedings and systematically refer to the Court of Justice all questions concerning the interpretation of Community law which are submitted to them. They can decline to make a reference and decide the matter themselves in cases where such questions are perfectly straightforward and the answer is obvious to any lawyer with a modicum of experience."

After analysing the third paragraph of Article 177, the Commission expresses the conviction that its earlier standpoint is correct. It takes the view that before there can be an obligation to make a reference for a preliminary ruling a question must arise before the national court of last instance and that question must relate to the interpretation of a text. According to the Commission, the word "question" is synonymous with "problem" and the verb "to interpret" means to comprehend and explain the wording of a text or a speech, the meaning of which is obscure or which creates uncertainty".

If therefore a provision is quite unequivocal "no question can arise and there is no need to seek an interpretation".

Admittedly, it is true that interpretation is a continuing process, even in relation to provisions which are unequivocal and therefore immediately comprehensible, but "it is clear however that only genuine problems, intellectual difficulties which need to be overcome can form the subject-matter of the questions of interpretation referred to in the third paragraph of Article 177".

The discretion which the Commission thus attributes to the court hearing the case falls into the same category as the discretionary powers which have already been entrusted to it. National courts must therefore decide cases brought before them and apply Community law, whilst recognizing the jurisdiction of the Court of Justice to interpret Community law. The Court of Justice's recognition of the national court's margin of discretion "would bear witness to its confidence in national courts"; moreover, only in a spirit of mutual confidence can the procedures provided for by Article 177 be applied successfully.

Of course, mistakes may be made by national courts in interpreting a provision of Community law but, in the Court's opinion, the drawbacks which may result from such errors are limited and offset by the advantages, especially

for the proper administration of justice, of not compelling the courts of last instance of the Member States to refer to the Court of Justice all questions concerning provisions of Community law".

However, the Commission wishes to "emphasize categorically that, in view of the peculiarities of Community law, the national court's discretion in relation to Community law must be exercised only with the greatest caution".

The Commission recalls in this regard that Community legislation is drafted in seven languages and frequently reflects political compromises with the result that "the exercise of a discretion by a national court in relation to Community legislation calls for much greater caution than recourse to the theory of the *acte clair* in a national context". Thus, before it exercises its discretion, a national court must first and foremost acquaint itself with the decisions of the Court of Justice and, if the slightest doubt exists, the supreme court must refer the matter to the Court of Justice for a preliminary ruling.

In the Commission's opinion, the result would be that "cases in which it is legitimate to refrain from referring a matter to the Court of Justice would in practice be very few".

The Commission therefore proposes that, the question referred to the Court of Justice for a preliminary ruling should be answered as follows:

"Under the third paragraph of Article 177 of the EEC Treaty courts against whose decisions there is no judicial remedy under national law must refer to the Court of Justice any question raised before them regarding the meaning of a provision of Community law, unless they have established that that provision does not give rise to any reasonable interpretative doubt."

III — Oral procedure

At the sitting on 8 June 1982, the plaintiffs in the main action, represented by G. M. Ubertazzi and F. Capelli, the Italian Government, represented by S. Laporta, Avvocato dello Stato, and the Commission of the European Communities, represented by G. Olmi, Deputy Director General of its Legal Department, and by Miss Mary Minch, a member of its Legal Department, acting as Agents, presented oral argument and replied to the questions put to them by the Court.

The Advocate General delivered his opinion at the sitting on 13 July 1982.

Decision

1 By order of 27 March 1981, which was received at the Court on 31 October 1981, the Corte Suprema di Cassazione [Supreme Court of Cassation] referred to the Court of Justice for a preliminary ruling under Article 177 of the EEC Treaty a question on the interpretation of the third paragraph of Article 177 of the EEC Treaty.

2 That question was raised in connection with a dispute between wool importers and the Italian Ministry of Health concerning the payment of a fixed health inspection levy in respect of wool imported from outside the Community. The firms concerned relied on Regulation (EEC) No 827/68 of 28 June 1968 on the common organization of the market in certain products listed in Annex II to the Treaty (Official Journal, English Special Edition 1968 (I) p. 209). Article 2 (2) of that regulation prohibits Member States from levying any charge having an effect equivalent to a customs duty on imported "animal products", not specified or included elsewhere, classified under heading 05.15 of the Common Customs Tariff. Against that argument the Ministry for Health contended that wool is not included in Annex II to the Treaty and is therefore not subject to a common organization of agricultural markets.

3 The Ministry of Health infers from those circumstances that the answer to the question concerning the interpretation of the measure adopted by the Community institutions is so obvious as to rule out the possibility of there being any interpretative doubt and thus obviates the need to refer the matter to the Court of Justice for a preliminary ruling. However, the companies concerned maintain that since a question concerning the interpretation of a regulation has been raised before the Corte Suprema di Cassazione, against whose decisions there is no judicial remedy under national law, that court cannot, according to the terms of the third paragraph of Article 177, escape the obligation to bring the matter before the Court of Justice.

4 Faced with those conflicting arguments, the Corte Suprema di Cassazione referred to the Court the following question for a preliminary ruling:

"Does the third paragraph of Article 177 of the EEC Treaty, which provides that where any question of the same kind as those listed in the first paragraph of that article is raised in a case pending before a national court or tribunal against whose decisions there is no judicial remedy under national law that court or tribunal must bring the matter before the Court of Justice, lay down an obligation so to submit the case which precludes the national court from determining whether the question raised is justified or does it, and if so within what limits, make that obligation conditional on the prior finding of a reasonable interpretative doubt?"

5 In order to answer that question it is necessary to take account of the system established by Article 177, which confers jurisdiction on the Court of Justice to give preliminary rulings on, *inter alia,* the interpretation of the Treaty and the measures adopted by the institutions of the Community.

6 The second paragraph of that article provides that any court or tribunal of a Member State *may,* if it considers that a decision on a question of interpretation is necessary to enable it to give judgment, request the Court of Justice to give a ruling thereon. The third paragraph of that article provides that, where a question of interpretation is raised in a case pending before a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law, that court or tribunal *shall,* bring the matter before the Court of Justice.

7 That obligation to refer a matter to the Court of Justice is based on cooperation, established with a view to ensuring the proper application and uniform interpretation of Community law in all the Member States, between national courts, in their capacity as courts responsible for the application of Community law, and the Court of Justice. More particularly, the third paragraph of Article 177 seeks to prevent the occurrence within the Community of divergences in judicial decisions on questions of Community law. The scope of that obligation must therefore be assessed, in view of those objectives, by reference to the powers of the national courts, on the one hand, and those of the Court of Justice, on the other, where such a question of interpretation is raised within the meaning of Article 177.

8 In this connection, it is necessary to define the meaning for the purposes of Community law of the expression "where any such question is raised" in order to determine the circumstances in which a national court or tribunal against whose decisions there is no judicial remedy under national law is obliged to bring a matter before the Court of Justice.

9 In this regard, it must in the first place be pointed out that Article 177 does not constitute a means of redress available to the parties to a case pending before a national court or tribunal. Therefore the mere fact that a party contends that the dispute gives rise to a question concerning the interpretation of Community law does not mean that the court or tribunal concerned is compelled to consider that a question has been raised within the meaning of Article 177. On the other hand, a national court or tribunal may, in an appropriate case, refer a matter to the Court of Justice of its own motion.

10 Secondly, it follows from the relationship between the second and third paragraphs of Article 177 that the courts or tribunals referred to in the third paragraph have the same discretion as any other national court or tribunal to ascertain whether a decision on a question of Community law is necessary to enable them to give judgment. Accordingly, those courts or tribunals are not obliged to refer to the Court of Justice a question concerning the interpretation of Community law raised before them if that question is not relevant, that is to say, if the answer to that question, regardless of what it may be, can in no way affect the outcome of the case.

11 If, however, those courts or tribunals consider that recourse to Community law is necessary to enable them to decide a case, Article 177 imposes an obligation on them to refer to the Court of Justice any question of interpretation which may arise.

12 The question submitted by the Corte di Cassazione seeks to ascertain whether, in certain circumstances, the obligation laid down by the third paragraph of Article 177 might none the less be subject to certain restrictions.

13 It must be remembered in this connection that in its judgment of 27 March 1963 in Joined Cases 28 to 30/62 *(Da Costa* v *Nederlandse Belastingadministratie* [1963] ECR 31) the Court ruled that: "Although the third paragraph of Article 177 unreservedly requires courts or tribunals of a Member State against whose decisions there is no judicial remedy under national law . . . to refer to the Court every question of interpretation raised before them, the authority of an interpretation under Article 177 already given by the Court may deprive the obligation of its purpose and thus empty it of its substance. Such is the case especially when the question raised is materially identical with a question which has already been the subject of a preliminary ruling in a similar case."

14 The same effect, as regards the limits set to the obligation laid down by the third paragraph of Article 177, may be produced where previous decisions of the Court have already dealt with the point of law in question, irrespective of the nature of the proceedings which led to those decisions, even though the questions at issue are not strictly identical.

15 However, it must not be forgotten that in all such circumstances national courts and tribunals, including those referred to in the third paragraph of Article 177, remain entirely at liberty to bring a matter before the Court of Justice if they consider it appropriate to do so.

16 Finally, the correct application of Community law may be so obvious as to leave no scope for any reasonable doubt as to the manner in which the question raised is to be resolved. Before it comes to the conclusion that such is the case, the national court or tribunal must be convinced that the matter is equally obvious to the courts of the other Member States and to the Court of Justice. Only if those conditions are satisfied, may the national court or tribunal refrain from submitting the question to the Court of Justice and take upon itself the responsibility for resolving it.

17 However, the existence of such a possibility must be assessed on the basis of the characteristic features of Community law and the particular difficulties to which its interpretation gives rise.

18 To begin with, it must be borne in mind that Community legislation is drafted in several languages and that the different language versions are all equally authentic. An interpretation of a provision of Community law thus involves a comparison of the different language versions.

19 It must also be borne in mind, even where the different language versions are entirely in accord with one another, that Community law uses terminology which is peculiar to it. Furthermore, it must be emphasized that legal concepts do not necessarily have the same meaning in Community law and in the law of the various Member States.

20 Finally, every provision of Community law must be placed in its context and interpreted in the light of the provisions of Community law as a whole, regard being had to the objectives thereof and to its state of evolution at the date on which the provision in question is to be applied.

21 In the light of all those considerations, the answer to the question submitted by the Corte Suprema di Cassazione must be that the third paragraph of

Article 177 of the EEC Treaty is to be interpreted as meaning that a court or tribunal against whose decisions there is no judicial remedy under national law is required, where a question of Community law is raised before it, to comply with its obligation to bring the matter before the Court of Justice, unless it has established that the question raised is irrelevant or that the Community provision in question has already been interpreted by the Court or that the correct application of Community law is so obvious as to leave no scope for any reasonable doubt. The existence of such a possibility must be assessed in the light of the specific characteristics of Community law, the particular difficulties to which its interpretation gives rise and the risk of divergences in judicial decisions within the Community.

Costs

22 The costs incurred by the Italian Government, the Danish Government and the Commission of the European Communities, which have submitted observations to the Court, are not recoverable.

As these proceedings are, in so far as the parties to the main action are concerned, in the nature of a step in the action pending before the Corte Suprema di Cassazione, the decision on costs is a matter for that court.

On those grounds,

THE COURT,

in answer to the question submitted to it by the Corte Suprema di Cassazione by order of 27 March 1981, hereby rules:

The third paragraph of Article 177 of the EEC Treaty must be interpreted as meaning that a court or tribunal against whose decisions there is no judicial remedy under national law is required, where a question of Community law is raised before it, to comply with its obligation to bring the matter before the Court of Justice, unless it has established that the question raised is irrelevant or that the Community

provision in question has already been interpreted by the Court of Justice or that the correct application of Community law is so obvious as to leave no scope for any reasonable doubt. The existence of such a possibility must be assessed in the light of the specific characteristics of Community law, the particular difficulties to which its interpretation gives rise and the risk of divergences in judicial decisions within the Community.

	Mertens de Wilmars	Bosco	Touffait
Due	Pescatore	Mackenzie Stuart	O'Keeffe
Koopmans	Everling	Chloros	Grévisse

Delivered in open court in Luxembourg on 6 October 1982.

P. Heim
Registrar

J. Mertens de Wilmars
President

OPINION OF MR ADVOCATE GENERAL CAPOTORTI DELIVERED ON 13 JULY 1982 [1]

Mr President,
Members of the Court,

The request for a preliminary ruling now before the Court concerns one of the provisions of the EEC Treaty relating to the powers of the Court, namely the third paragraph of Article 177. The Italian Corte Suprema di Cassazione [Supreme Court of Cassation] wishes to ascertain whether that provision lays down an obligation to submit a case to the Court of Justice which precludes the national court from determining whether the question raised is justified or whether, and if so within what limits, it makes that obligation conditional on the prior finding of a reasonable interpretative doubt.

I shall briefly summarize the facts of the case. In September 1974 a large number

1 — Translated from the Italian.

Judgment of the Court of Justice, Foto-Frost, Case 314/85 (22 October 1987)

Caption: According to the Foto-Frost judgment, national courts may consider the validity of a Community act. However, national courts themselves have no jurisdiction to declare that a Community act is invalid (in this case, a Commission decision). Only the Court of Justice, responsible for ensuring that Community law is applied uniformly in all the Member States, has the jurisdiction both to declare void or invalid an act of a Community institution.
Source: Reports of Cases before the Court. 1987. [s.l.].

URL: http://www.cvce.eu/obj/judgment_of_the_court_of_justice_foto_frost_case_314_85_22_october_1987-en-c7c46f32-9ff3-466e-b57a-a34cfd2e93eb.html
Publication date: 24/10/2012

Case 314/85
Foto-Frost v Hauptzollamt Lübeck-Ost

(request for a preliminary ruling from the Finanzgericht Hamburg)

(Lack of jurisdiction of national courts to declare acts of Community institutions invalid — Validity of a decision on the post-clearance recovery of import duties)

[…]

Summary of the judgment

1. Preliminary questions — Appraisal of validity — Declaration of invalidity — Lack of jurisdiction of national courts (EEC Treaty, Arts 173, 177 and 184)

2. Own resources of the European Communities — Post-clearance recovery of import or export duties — Importer fulfilling the requirements set out in Article 5 (2) of Regulation No 1697/79 — Post-clearance recovery — Precluded (Council Regulation No 1697/79, Art. 5 (2))

1. National courts against whose decisions there is a judicial remedy under national law may consider the validity of a Community act and, if they consider that the grounds put forward before them by the parties in support of invalidity are unfounded, they may reject them, concluding that the measure is completely valid. In contrast, national courts, whether or not a judicial remedy exists against their decisions under national law, themselves have no jurisdiction to declare that acts of Community institutions are invalid.

That conclusion is dictated, in the first place, by the requirement for Community law to be applied uniformly. Divergences between courts in the Member States as to the validity of Community acts would be liable to place in jeopardy the very unity of the Community legal order and detract from the fundamental requirement of legal certainty.

Secondly, it is dictated by the necessary coherence of the system of judicial protection established by the Treaty. In Articles 173 and 184, on the one hand, and in Article 177, on the other, the Treaty established a complete system of legal remedies and procedures designed to permit the Court of Justice to review the legality of measures adopted by the institutions. Since Article 173 gives the Court exclusive jurisdiction to declare void an act of a Community institution, the coherence of the system requires that where the validity of an act is challenged before a national court the power to declare the act invalid must also be reserved for the Court of Justice.

That division of jurisdiction may have to be qualified in certain circumstances where the validity of a Community act is contested before a national court in proceedings relating to an application for interim measures.

2. Article 5 (2) of Council Regulation No 1697/79 on the post-clearance recovery of import or export duties, which lays down three specific requirements which must be fulfilled before the competent authorities may waive the post-clearance recovery of duties, must be interpreted as meaning that if all those requirements are fulfilled the person liable is entitled to the waiver of the recovery of the duty in question.

REPORT FOR THE HEARING
delivered in Case 314/85 *

1 — Facts and procedure

A — Legislative context

The matter at issue in the main proceedings is the post-clearance recovery of import duties in respect of the purchase by a trader in the Federal Republic of Germany from traders in other Member States of goods manufactured in the German Democratic Republic.

The post-clearance recovery of import duties which have not been required of the person liable for payment on goods entered for a customs procedure involving the obligation to pay such duties is governed by Council Regulation No 1697/79 of 24 July 1979 (Official Journal 1979, L 197, p. 1).

Article 5 (2) of the regulation governs the situation where the duties have not been collected as a result of an error made by the competent authorities themselves. It provides as follows:

‘The competent authorities may refrain from taking action for the post-clearance recovery of import duties … which were not collected as a result of an error made by the competent authorities themselves which could not reasonably have been detected by the person liable, the latter having for his part acted in good faith and observed all the provisions laid down by the rules in force as far as his customs declaration is concerned.

The cases in which the first subparagraph can be applied shall be determined in accordance with the implementing provisions laid down in accordance with the procedure provided for in Article 10’.

The Commission adopted the relevant implementing provisions in Regulation (EEC) No 1573/80 of 20 June 1980 (Official Journal 1980, L 161, p. 1) on the basis of Article 5 (2) of Regulation No 1697/79 and after consulting the Committee on Duty-free Arrangements pursuant to Article 10 of that regulation.

Regulation No 1573/80 provides that where the amount of the duties involved is equal to or greater than 2 000 ECU the competent authority of the Member State ‘shall request the Commission to take a decision on the case, submitting to it all the necessary background information’ (Article 4). After consulting a group of experts from the Member States meeting within the framework of the Committee on Duty-free Arrangements, the Commission ‘shall decide whether the circumstances under consideration are such that no action should be taken for recovery of the duties concerned’ (Article 6). Its decision is to be addressed to the Member State whose competent authority requested the Commission to take a decision on the matter.

B — Facts

Heinz Frost, the plaintiff in the main proceedings, is an importer, exporter and wholesaler of photographic goods in the Federal Republic of Germany, where he trades under the name of Foto-Frost.

Between 23 September 1980 and 9 July 1981 Foto-Frost purchased prismatic binoculars made in the German Democratic Republic from traders in Denmark and in the United Kingdom.

The goods were dispatched under the external Community transit procedure (Article 12 *et seq.* of Council Regulation (EEC) No 222/77 of 13 December 1976 on Community transit, Official Journal 1977, L 38, p. 1) from customs warehouses in Denmark and in the Netherlands. That procedure enables goods coming from a non-member country which are not in free circulation in a Member State to be transported within the Community without renewed customs formalities when the goods cross from one Member State to another.

When Foto-Frost declared the goods for free circulation in the Federal Republic of Germany the competent customs offices, as in the case of previous similar operations, allowed the goods to enter free of duty on the ground that they had been manufactured in the German Democratic Republic.

Following a check, Hauptzollamt Lübeck-Ost took the view that under the German customs legislation the operations in question should give rise to the post-clearance recovery of import duties.

However, the Hauptzollamt considered that Foto-Frost satisfied the requirements laid down in the first subparagraph of Article 5 (2) of Regulation No 1697/79 for the waiver of the post-clearance recovery of duties. Foto-Frost had duly completed its customs declaration and was entitled to believe in good faith that the decision of the customs offices was correct, since similar previous operations had also been exempt from duty.

Since the amount of the duty involved was greater than 2 000 ECU, under Article 4 of the aforementioned implementing regulation (Regulation No 1573/80) the Hauptzollamt itself was not empowered to take the decision not to effect post-clearance recovery of the uncollected duty.

Consequently, the Hauptzollamt referred the matter to the Federal Minister for Finance. By a letter dated 4 February 1983 the Minister requested the Commission to decide under Article 6 of Regulation No 1573/80 whether the post-clearance recovery of the import duties in question could be waived.

On 6 May 1983 the Commission delivered its decision to the Federal Republic of Germany to the effect that post-clearance recovery could not be waived.

In that decision the Commission states in the first place that, in accordance with usual practice, the customs authorities had initially merely accepted Foto-Frost's statements as being correct.

The decision goes on to state as follows:

'Whereas it was found when the declarations were checked subsequently that the binoculars declared for free circulation under the conditions described above did not meet the conditions for duty-free admission under the arrangements for inter-German trade;

Whereas the importer was in a position to consider the circumstances of the import operations in question in the light of the provisions governing inter-German trade, the application of which he was claiming; whereas he could thus detect any error in implementing these provisions; whereas, moreover, it has been established that he did not comply with all the provisions laid down by the rules in force as regards the customs declarations;

Whereas consequently the conditions laid down in Article 5 (2) of Regulation (EEC) No 1697/79 are not met;

Whereas there is therefore no justification for not effecting the post-clearance recovery of import duties in this case'.

On those grounds, the Commission decided that 'the import duties of DM 64 346.53, the subject-matter of the request by the Federal Republic of Germany dated 4 February 1983, shall be the subject of post-clearance recovery'.

Following that decision, Hauptzollamt Lübeck-Ost issued an amendment notice on 22 July 1983 in respect of the import operations in question. In that notice the Hauptzollamt notified Foto-Frost that the Commission had adopted a decision on 6 May 1983 to the effect that the competent authorities in the Federal Republic of Germany could not waive the post-clearance recovery of duty in its case. However, the Hauptzollamt did not specify the grounds for the Commission's decision. Accordingly it claimed payment from Foto-Frost of DM 64 346.53 by way of customs duties on the imports. It also claimed payment of DM 12 786.10 by way of import turnover tax in respect of the same operations.

Foto-Frost did not challenge the Commission's decision before the Court of Justice. It did, however, request the Finanzgericht Hamburg to suspend the operation of the amendment notice issued by the Hauptzollamt.

In an order of 22 September 1983 the Finanzgericht took the view that the effect of the Protocol on German internal trade was to exempt operations which fell within the ambit of German internal trade from import duties. Paragraph 1 of that Protocol provided as follows: 'Since trade between the German territories subject to the Basic Law for the Federal Republic of Germany and the German territories in which the Basic Law does not apply is a part of German internal trade, the application of this Treaty in Germany requires no change in the treatment currently accorded this trade'. In the light of the case-law of both the courts of the Federal Republic of Germany and the Court of Justice the Finanzgericht considered that the operations in question appeared to fall within the ambit of German internal trade. Consequently, it considered that it was appropriate to suspend the amendment notice until it had been established definitively, if necessary after referring a preliminary question to the Court of Justice, whether post-clearance recovery of the import duties was justified in this case.

In addition, Foto-Frost instituted proceedings before the Finanzgericht Hamburg for the definitive annulment of the amendment notice.

C — The preliminary questions

In the course of those proceedings, the Finanzgericht Hamburg decided, by order of 29 August 1985, to stay the proceedings and to refer the following questions to the Court of Justice for a preliminary ruling under Article 177 of the EEC Treaty:

‘(1) Can the national court review the validity of a decision adopted by the Commission pursuant to Article 6 of Commission Regulation (EEC) No 1573/80 of 20 June 1980 (Official Journal L 161, p. 1) on whether the post-clearance recovery of import duties should be waived pursuant to Article 5 (2) of Council Regulation (EEC) No 1697/79 of 24 July 1979 (Official Journal L 197, p. 1), which decision held that there was no justification for waiving the recovery of the import duties, and can it, if appropriate, hold in proceedings challenging such a decision that recovery of the duties should be waived?

(2) If the national court cannot review the validity of the Commission’s decision, is the Commission’s decision of 6 May 1983 (ECR 3/83) valid?

(3) If the national court can review the validity of the Commission’s decision, is Article 5 (2) of Regulation (EEC) No 1697/79 to be interpreted as conferring a power to adopt a discretionary decision, which may be reviewed by the Court only as regards abuses of that discretion (and if so, which abuses?) without any possibility of substituting its own discretion, or does it confer the power to adopt a measure of equitable relief, which is fully subject to review by the court?

(4) If the assessment to customs duties cannot be waived pursuant to Article 5 (2) of Regulation (EEC) No 1697/79, do goods originating in the German Democratic Republic which have been introduced into the Federal Republic of Germany via a Member State other than Germany by way of the external Community transit procedure fall within the ambit of German internal trade within the meaning of the Protocol on German internal trade and connected problems of 25 March 1957, with the consequence that when they are imported into the Federal Republic of Germany they are liable neither to customs duties nor to import turnover tax, or are such charges to be levied as in the case of imports from non-member countries, so that Community customs duties, in accordance with the relevant customs legislation, and import turnover tax, in accordance with Article 2 (2) of the Sixth Council Directive on the harmonization of turnover taxes in the European Communities, are to be levied?’

The Finanzgericht set out the following matters in its request for a preliminary ruling by way of explanation of the questions referred to the Court.

In the first place, in its opinion, the validity of the Commission’s decision is doubtful. Foto-Frost’s position appears to satisfy the requirements laid down in the first subparagraph of Article 5 (2) of Regulation No 1697/79 (an error by the competent authorities which could not reasonably have been detected by the person liable, good faith on the latter’s part and observance of all the provisions laid down as far as the customs declaration is concerned). Since the amendment notice at issue was based on the Commission’s decision of 6 May 1983 the Finanzgericht considers that it could not annul the notice unless the decision has been declared invalid first.

The Finanzgericht therefore asks, in the first place, whether it can itself review the validity of the Commission's decision. In its opinion it is for the Court of Justice alone to rule on the validity of the Commission's decision of 6 May 1983, but it nevertheless seeks the Court's ruling on that question.

Secondly, in the event that the Court states that it alone has the power to review the validity of the Commission's decision, the Finanzgericht requests the Court of Justice to review the validity of that decision.

Thirdly, in the event that the Court nevertheless considers that the Finanzgericht itself can decide on the validity of the Commission's decision, it asks whether the application of Article 5 (2) of Regulation No 1697/79 is based upon the exercise of a discretion which the national court may review only as regards an abuse thereof ('Ermessensfehler') or whether, as the Finanzgericht itself believes, it is based upon a measure of equitable relief all aspects of which are open to review.

Fourthly, in the event that it is clear from the answers given to the foregoing questions that it was not possible in this case to waive post-clearance recovery, the Finanzgericht asks whether Foto-Frost did in fact have to pay duty on the operations in question. According to the Finanzgericht this question is concerned to establish whether the operations in question fell within the scope of German internal trade for the purposes of the Protocol on German internal trade. Contrary to the view expressed in the order of 22 September 1983, it considers that those operations did not fall within the scope of that trade. It is now of the opinion that the protocol covers only those transactions which fell within the ambit of German internal trade within the meaning of the German legislation in force at the time when the protocol was adopted. At the time when the protocol came into force, operations of the type with which this case is concerned did not fall within the ambit of German internal trade.

The Finanzgericht's order was received at the Court Registry on 18 October 1985.

In accordance with Article 20 of the Protocol on the Statute of the Court of Justice, written observations were submitted on 6 January 1986 by Hauptzollamt Lübeck-Ost, the defendant in the main proceedings, represented by its Director, Mr Koal, on 14 January 1986 by the Commission of the European Communities, represented by Jörn Sack, acting as Agent, on 16 January 1986 by the Government of the Federal Republic of Germany, represented by Martin Seidel, acting as Agent, and on 20 January 1986 by Foto-Frost, the plaintiff in the main proceedings, represented by Messrs Modest, Gündisch and Landry, Rechtsanwälte, Hamburg.

Upon hearing the report of the Judge-Rapporteur and the views of the Advocate General, the Court decided to open the oral procedure without any preparatory inquiry. Nevertheless, the Court requested Foto-Frost, the government of the Federal Republic of Germany and the Commission to reply in writing to a number of questions and to produce certain documents. Those requests were acted upon within the period laid down.

2 — Written observations submitted to the Court

The first question (competence of courts against whose decisions a judicial remedy exists under national law to declare a Community act invalid themselves without referring the matter to the Court of Justice under Article 177 of the EEC Treaty)

Foto-Frost interprets Article 177 of the EEC Treaty as meaning that the power to judge the validity of acts of the Community institutions is confined to the Court of Justice. Such a conclusion is necessary in order to ensure uniform application of the relevant provisions of Community law.

The *government of the Federal Republic of Germany* states, without giving reasons for its view, that the Court of Justice alone has the power to annul an act of a Community institution.

The *Commission* considers that the second paragraph of Article 177 of the EEC Treaty cannot be interpreted

as conferring on a court or tribunal against whose decisions a judicial remedy exists the power to declare Community acts invalid or inapplicable.

In the first place, such an interpretation would detract from the binding effect which Article 189 of the EEC Treaty attributes to acts of the Community institutions. The binding effect of a decision addressed to a Member State extends, moreover, to all the authorities of that State, including its courts, in so far as the Court of Justice has not declared the decision unlawful.

According to the Commission, this case shows that if it were accepted that a national court or tribunal against whose decisions judicial remedies lie has the power to set aside the application of Community acts, the binding effect of those acts could easily be circumvented, specifically in situations of conflict. The Commission's decision does not always correspond to the point of view of the Member State to which it is addressed. If the national court or tribunal were to declare the Community decision invalid, the Member State could refrain from lodging an appeal against the judgment and the decision would therefore be deprived of its binding effect.

Secondly, the distribution of responsibilities between the Court of Justice and national courts in any event requires the power to rule on the validity of Community acts to be confined to the Court.

For reasons relating to the effective legal protection of individuals the Commission accepts a single exception, namely the possibility of granting a suspension in urgent cases, that is to say in connection with an application for interim measures, provided that in the main proceedings a reference is made to the Court of Justice. In that regard the Commission refers to the observations submitted by it in Cases 97/85 *Union Deutsche Lebensmittelwerke GmbH* v *Commission* [1987] ECR 2265 and 249/85 *Albako Margarinefabrik* v *Bundesanstalt für landwirtschaftliche Marktordnung* [1987] ECR 2345.

The second question (validity of the Commission's decision of 6 May 1983)

Foto-Frost considers that the decision of 6 May 1983 is invalid. In order to support that view Foto-Frost attempts to show first that the Commission is under a duty to adopt a decision declaring that the situation examined by it is such as to permit the waiver of post-clearance recovery of the duty in question where the requirements laid down in the first subparagraph of Article 5 (2) of Regulation No 1697/79 are satisfied and, secondly, that those requirements were actually satisfied in this case.

Foto-Frost bases its view that the Commission was under a duty to adopt a decision permitting post-clearance recovery to be waived on two arguments.

First, it maintains that the preamble to Council Regulation No 1697/79 expresses a concern to limit post-clearance recovery in the light of the need for legal certainty. In Foto-Frost's view its interpretation of Article 5 (2) is consistent with the objective of legal certainty, since it results in uniform application of the provision in all Member States.

Secondly, Foto-Frost states that even if there is no provision expressly obliging the Commission to adopt a decision permitting post-clearance recovery to be waived where the requirements laid down in Article 5 (2) are satisfied, Article 2 of Commission Regulation No 1573/80 obliges the national authorities, when the question falls to be decided by them, not to take action for post-clearance recovery in such cases. Foto-Frost takes the view that it is possible to infer by analogy from that provision that when the question falls to be decided by the Commission it is bound to adopt a decision permitting post-clearance recovery to be waived in those circumstances.

Foto-Frost then endeavours to show that the requirements laid down in Article 5 (2) were in fact satisfied in this case, in particular that it acted in good faith. In that regard it places particular emphasis on the fact that the Finanzgericht Hamburg itself considered in its order of 22 September 1983 suspending the amendment notice that it was extremely doubtful whether import duty could be levied in respect of the goods in

question. Consequently, Foto-Frost, which had no expertise in the matter, could be excused for not having detected the alleged mistake. In addition, previous imports of a similar nature had always been exempted from duty. Finally, it maintains that it completed the customs declarations correctly.

According to Foto-Frost, it follows from the foregoing that the Commission was under a duty to adopt a decision permitting post-clearance recovery of the duty in question to be waived. Consequently, its decision of 6 May 1983 is invalid.

The *government of the Federal Republic of Germany* does not wish to submit any opinion on the second question. However, it points out that the German customs authorities at no time cast doubt on the validity of the decision and, on the contrary, ensured its execution.

The *Commission* contends, in the first place, that the duty in question was in fact payable. It goes on to maintain that the error which led the customs authorities not to claim the duty could have been detected by Foto-Frost.

In order to show that the duty in question was payable the Commission states that the system of trade between the Federal Republic of Germany and the German Democratic Republic, which is regulated by the Berlin Agreement of 20 September 1951 (the version in force at the relevant time was published in the annex to *Bundesanzeiger* No 41 of 28.2.1979), is based on two essential ideas. First, on account of the contrasting nature of the two economic systems, German internal trade is subject to significant restrictions with regard to quantities and price. Secondly, the system of trade is based on the idea that a single customs territory continues to exist despite the division of Germany, with the consequence that direct economic relations between the Federal Republic of Germany and the German Democratic Republic are exempt from import duty.

With regard more particularly to what are known as triangular operations, such as those at issue in the main proceedings, the Commission accepts that they fall within the ambit of German internal trade. They are therefore subject to certain provisions of that trade system and, in particular, to the restrictions applicable with regard to quantities and price. However, such transactions are not subject to all the rules which generally govern operations falling within the ambit of German internal trade. Thus, they are not exempt from customs duty since that exemption applies only to goods which have not left the single customs territory (Federal Republic of Germany and German Democratic Republic). Moreover, the Protocol on German internal trade does not provide that operations falling within the ambit of German internal trade are necessarily exempt from import duty.

In order to show that the error committed by the customs offices could have been detected, the Commission argues that the position in the Federal Republic of Germany has been settled as described above since a judgment of the Bundesfinanzhof (Federal Finance Court) of 3 July 1958 (*Zeitschrift für Zölle and Verbrauchssteuern*, 1958, p. 373). Since Foto-Frost specialized in trade with the German Democratic Republic it could have obtained that information without difficulty. Since it had not made the relevant inquiries it bore a substantial part of the responsibility for the error which occurred and could not therefore seek to benefit from the first subparagraph of Article 5 (2) of Regulation No 1697/79.

In its view the decision of 6 May 1983 was therefore valid.

The third question (scope of the power of review of the national court in the event that the Court of Justice considers that the national court has the power to declare such a decision invalid itself)

The *government of the Federal Republic of Germany* and the *Commission* consider that in view of the proposed reply to the first question there is no need to reply to the third question.

The fourth question (do the operations in question fall within the ambit of German internal trade for the purposes of the Protocol on German internal trade and hence are not liable to customs duty and turnover

tax?)

Foto-Frost states that customs duty was not payable in respect of the operations in question since they fell within the scope of German internal trade within the meaning of the relevant protocol.

In that regard it refers to Paragraph 16 of the Regulation of 1 March 1979 implementing the interzonal trade regulation (*Supplement to Bundesanzeiger* No 47 of 8.3.1979, p. 3) according to which German internal trade includes triangular transactions, defined as follows: 'Operations effected between a person located in the territory of the Federal Republic of Germany and a person located in a country other than the Federal Republic of Germany or the German Democratic Republic on the basis of which goods ... are to be transported from the currency area of the mark of the German Democratic Republic to the territory of the Federal Republic of Germany either directly or via some other country'.

Foto-Frost recognizes that the adoption of that rule is of a later date to the protocol. However, the legislation in force at the time of the protocol's adoption itself gave a very wide definition to operations falling within the ambit of German internal trade and did not exclude operations such as the ones at issue in this case. In its view that was the reason why the Bundesverwaltungsgericht (Federal Administrative Court) decided in its judgment of 26 June 1981 (*Zeitschrift fur Zölle and Verbrauchssteuern*, 1982, p. 55) that German internal trade within the meaning of the protocol also covered triangular transactions. Foto-Frost also refers to the judgment of the Court of Justice of 27 September 1979 in Case 23/79 (*Geflügelschlachterei Freystadt* v *Hauptzollamt Hamburg-Jonas* [1979] ECR 2789, at p. 2802) according to which the sequence of commercial transactions and their forms do not need to be taken into account in determining whether or not a transaction forms part of German internal trade.

With regard to import turnover tax, Foto-Frost refers to the German Government's declaration concerning Article 3 of the Sixth Council Directive on the harmonization of the laws of the Member States relating to turnover taxes. By that declaration the German Government reserved the right to treat the territory of the German Democratic Republic as forming part of its national territory for the purposes of turnover tax. A circular issued by the Federal Minister for Finance concerning German law on turnover tax states that the importation into the Federal Republic of Germany, within the framework of German internal trade, of goods which are in free circulation in the currency area of the mark of the German Democratic Republic is not subject to import turnover tax.

In their observations concerning the fourth question the *Hauptzollamt*, the *government of the Federal Republic of Germany* and the *Commission* deal only with the question of customs duty since the question of turnover tax does not fall within the Community rules governing post-clearance recovery of import duties.

According to the *Hauptzollamt* it does not follow from the fact that an operation falls within the ambit of German internal trade that it is exempt from import duty. It is clear from the Berlin Agreement of 20 September 1951 that only goods which are imported directly and whose cost is settled by means of a clearing system between the central banks of the two countries in question are exempt from import duty. Since triangular transactions do not give rise to such clearing there is no reason for them to be exempt from customs duty. The Hauptzollamt therefore considers that it is not necessary for the purposes of these proceedings to determine whether or not triangular transactions fall within the ambit of German internal trade.

The *government of the Federal Republic of Germany* considers that the exemption from duty provided for by the protocol applies only to operations which were exempt under the German legislation in force at the time when the protocol was adopted. At the time when the protocol was adopted import duty had to be paid in respect of goods imported into the Federal Republic of Germany by virtue of a triangular operation. The exemption from duty provided for by the protocol does not therefore extend to such operations. The Government states in that regard that since the establishment of the Community it has always levied Community customs duty in respect of triangular operations and has remitted it to the Community.

The *Commission* considers that the fourth question is irrelevant. In its view there is no need to consider whether or not operations such as those at issue in this case fall within the scope of German internal trade. Even if they did fall within the scope of that trade that would not make them exempt from import duty. The protocol refers expressly to 'the treatment currently accorded' German internal trade, that is to say the system in force at the time when the protocol was adopted. At that time import duty was payable in respect of triangular operations. Consequently, the protocol does not provide a basis for exempting the operations at issue from import duty.

3 — Answers to questions put by the Court

(1) *Foto-Frost* was asked to answer the following two questions:

'(a) Why were the goods whose importation gave rise to the customs duty at issue not imported directly from the German Democratic Republic into the Federal Republic of Germany?

(b) What *was* the final destination of the goods?'

In reply to the *first question* Foto-Frost explained that there were agreements between Firma Carl Zeiss Jena (German Democratic Republic) and Firma Carl Zeiss Oberkochen (Federal Republic of Germany) under which the goods in question had to pass through a third country.

Foto-Frost replied to the *second question* that it had exported those binoculars at issue which it had purchased during 1980 to Italy. Of those which it had acquired during 1981 some were exported to Italy and South Africa and some were sold to two other undertakings established in the Federal Republic of Germany which, to the best of its knowledge, subsequently exported them.

(2) The *Commission* was asked by the Court to state in what manner Foto-Frost had failed to observe all the requirements laid down by the rules in force with regard to customs declarations.

The Commission replied that in its decision of 6 May 1983 it had regarded the question whether or not Foto-Frost had observed all the requirements laid down by the rules in force with regard to customs declarations as being of secondary importance. However, it accepted in its reply to this question that Foto-Frost had completed its customs declaration correctly. The complaint made by the Commission against Foto-Frost in its decision was that the latter had maintained *vis-à-vis* the customs authorities that the goods were exempt from customs duty because they originated in the German Democratic Republic whereas the question was doubtful. The Commission considered that a person liable to pay duty who submits a declaration to the customs authorities cannot act as if he qualifies for some entitlement when the matter is manifestly open to doubt.

(3) The *government of the Federal Republic of Germany* was asked by the Court to explain the system of German internal trade, the application of which is protected by the Protocol of 25 March 1957, in order to enable the Court to place the fourth question in the relevant context of primary and secondary legislation.

In its answer to the question the German Government states that the system of German internal trade within the meaning of the protocol is based on the Berlin Agreement of 20 September 1951, various regulations and laws adopted in 1949 and 1950 by the respective governments and military commanders, and implementing regulations subsequently adopted by the legislature of the Federal Republic of Germany.

Under the laws and regulations adopted by the military authorities transactions for the purchase of goods between the Federal Republic of Germany and the German Democratic Republic are, in principle, prohibited.

Nevertheless, the government of the Federal Republic of Germany has the right to provide for exceptions to

that prohibition.

Operations authorized pursuant to such derogations are effected by means of a clearing system. That means that they are not paid for in freely convertible currency but are entered in clearing accounts kept on behalf of the Federal Republic of Germany by the Deutsche Bundesbank and on behalf of the German Democratic Republic by the Staatsbank.

In order that trade relations between the Federal Republic of Germany and the German Democratic Republic are conducted exclusively by means of the clearing system, measures have been adopted to prevent goods originating in the German Democratic Republic from being imported into the Federal Republic of Germany via other countries. The German Democratic Republic is able, by means of such indirect imports, to obtain freely convertible currency and thereby circumvent the clearing system.

The measures in question are contained in the laws and regulations adopted by the military authorities. They established a system of advance authorization and monitoring which is applied very strictly by the government of the Federal Republic of Germany.

The German Government also states that at the time when the protocol was adopted customs duty was payable on triangular operations. The exemption provided for by the protocol does not therefore extend to such operations.

Finally, the German Government states that since triangular operations are subject to import customs duty they are also subject to turnover tax.

R. Joliet
Judge-Rapporteur

[…]

JUDGMENT OF THE COURT
22 October 1987 *

In Case 314/85

REFERENCE to the Court under Article 177 of the EEC Treaty by the Finanzgericht (Finance Court) Hamburg for a preliminary ruling in the proceedings pending before that court between

Foto-Frost, Ammersbek,

and

Hauptzollamt Lübeck-Ost,

on the interpretation of Article 177 of the EEC Treaty, Article 5 (2) of Council Regulation No 1697/79 (EEC) of 24 July 1979 on the post-clearance recovery of import duties or export duties which have not been required of the person liable for payment on goods entered for a customs procedure involving the obligation to pay such duties (Official Journal 1979, L 197, p. 1), on the interpretation of the Protocol of 25 March 1957 on German internal trade and connected problems, and on the validity of a Commission decision addressed on 6 May 1983 to the Federal Republic of Germany finding that the post-clearance recovery of import duties must be effected in a particular case,

THE COURT,

composed of: Lord Mackenzie Stuart, President, G. Bosco, J. C. Moitinho de Almeida and G. C. Rodríguez Iglesias (Presidents of Chambers), T. Koopmans, U. Everling, K. Bahlmann, Y. Galmot, R. Joliet,

T. F. O'Higgins and F. Schockweiler, Judges,

Advocate General: G. F. Mancini
Registrar: J. A. Pompe, Deputy Registrar

after considering the observations submitted on behalf of

— Foto-Frost, the plaintiff in the main proceedings, by H. Heemann, Rechtsanwalt, Hamburg, assisted by H. Frost, expert,

— the Government of the Federal Republic of Germany, by M. Seidel, acting as Agent,

— the Commission of the European Communities, by J. Sack, a member of its Legal Department, acting as Agent,

having regard to the Report for the Hearing as supplemented further to the hearing on 16 December 1986,

after hearing the Opinion of the Advocate General delivered at the sitting on 19 May 1987,

gives the following

Judgment

1 By an order of 29 August 1985, which was received at the Court on 18 October 1985, the Finanzgericht (Finance Court) Hamburg referred to the Court for a preliminary ruling under Article 177 of the EEC Treaty several questions concerning the interpretation of Article 177 of the EEC Treaty, Article 5 (2) of Council Regulation No 1697/79 on 24 July 1979 on the post-clearance recovery of import duties or export duties (Official Journal 1979, L 197, p. 1) and the Protocol of 25 March 1957 on German internal trade and connected problems, and the validity of a Commission decision addressed on 6 May 1983 to the Federal Republic of Germany finding that the post-clearance recovery of import duties must be effected in a particular case.

2 Those questions were raised in proceedings brought by Firma Foto-Frost, Ammersbek (Federal Republic of Germany), an importer, exporter and wholesaler of photographic goods, for the annulment of a notice issued by the Hauptzollamt (Principal Customs Office) Lübeck-Ost for the post-clearance recovery of import duties following a Commission decision addressed to the Federal Republic of Germany on 6 May 1983 in which it was held that it was not permissible to waive the recovery of import duties in the case in question.

3 The operation to which the recovery of duties related were Foto-Frost's importation into the Federal Republic of Germany and release for free circulation there of prismatic binoculars originating in the German Democratic Republic. Foto-Frost purchased the binoculars from traders in Denmark and the United Kingdom, which dispatched them to it under the Community external transit procedure from customs warehouses in Denmark and the Netherlands.

4 The competent customs offices initially allowed the goods to enter free of duty on the ground that they originated in the German Democratic Republic. Following a check, Hauptzollamt Lübeck-Ost, the principal customs office, considered that customs duty was due under the German customs legislation. However, it took the view that it was not appropriate to effect the post-clearance recovery of the duty on the ground that Foto-Frost fulfilled the requirements set out in Article 5 (2) of Council Regulation No 1697/79, which provides that 'The competent authorities may refrain from taking action for the post-clearance recovery of import duties or export duties which were not collected as a result of an error made by the competent authorities themselves which could not reasonably have been detected by the person liable, the latter having for his part acted in good faith and observed all the provisions laid down by the rules in force as far as his customs declaration is concerned'. According to the order requesting a preliminary ruling the Hauptzollamt

took the view that Foto-Frost had completed the customs declaration correctly and could not have been expected to detect the error in so far as other customs offices had considered that previous similar operations did not give rise to the payment of duty.

5 Since the amount of the duty involved was greater than 2 000 ECU, under Commission Regulation No 1573/80 of 20 June 1980 laying down provisions for the implementation of Article 5 (2) of the aforementioned Council Regulation No 1697/79 (Official Journal 1980, L 161, p. 1) the Hauptzollamt itself was not empowered to take the decision not to effect post-clearance recovery. Consequently, at the Hauptzollamt's request, the Federal Minister for Finance requested the Commission to decide under Article 6 of the aforesaid Regulation No 1573/80 whether the post-clearance recovery of the duty in question could be waived.

6 On 6 May 1983 the Commission addressed to the Federal Republic of Germany a decision to the effect that it could not. The grounds given for the decision were that 'the customs offices concerned did not themselves make an error in the application of the provisions governing inter-German trade but merely accepted as correct, without immediate question, the information given on the declarations presented by the importer; ... this practice in no way prevents those authorities from subsequently making a correction in respect of charges, this possibility being expressly provided for in Article 10 of Council Directive 79/695/EEC of 24 July 1979 on the harmonization of procedures for the release of goods for free circulation' (Official Journal 1979, L 205, p. 19). It further considered that 'the importer was in a position to consider the circumstances of the import operations in question in the light of the provisions governing inter-German trade, the application of which he was claiming; ... he could thus detect any error in implementing these provisions; ... it has been established that he did not comply with all the provisions laid down by the rules in force as regards the customs declarations'.

7 Following that decision the Hauptzollamt issued the notice for the post-clearance recovery of duty which Foto-Frost is contesting in the main proceedings.

8 Foto-Frost applied to the Finanzgericht Hamburg for an order suspending the operation of that notice. The Finanzgericht allowed the application on the ground that the operations in question appeared to fall within the ambit of German internal trade and were therefore exempt from customs duty under the Protocol on German internal trade.

9 Foto-Frost then applied to the Finanzgericht Hamburg for the annulment of the notice for the post-clearance recovery of duty. The Finanzgericht took the view that the validity of the Commission's decision of 6 May 1983 was doubtful on the ground that all the requirements set out in Article 5 (2) of Council Regulation No 1697/79 for refraining from taking action for the post-clearance recovery of duty were fulfilled. Since the contested notice was based on the Commission's decision, the Finanzgericht considered that it could not annul it unless the Community decision was itself invalid. The Finanzgericht therefore referred the following four questions to the Court for a preliminary ruling:

'(1) Can the national court review the validity of a decision adopted by the Commission pursuant to Article 6 of Commission Regulation (EEC) No 1573/80 of 20 June 1980 (Official Journal L 161, p. 1) on whether the post-clearance recovery of import duties should be waived pursuant to Article 5 (2) of Council Regulation (EEC) No 1697/79 of 24 July 1979 (Official Journal L 197, p. 1), which decision held that there was no justification for waiving the recovery of the import duties, and can it, if appropriate, hold in proceedings challenging such a decision that recovery of the duties should be waived?

(2) If the national court cannot review the validity of the Commission's decision, is the Commission's decision of 6 May 1983 (ECR 3/83) valid?

(3) If the national court can review the validity of the Commission's decision, is Article 5 (2) of Regulation No 1697/79 to be interpreted as conferring a power to adopt a discretionary decision, which may be

reviewed by the court only as regards abuses of that discretion (and if so, which abuses?) without any possibility of substituting its own discretion, or does it confer the power to adopt a measure of equitable relief, which is fully subject to review by the court?

(4) If the assessment to customs duties cannot be waived pursuant to Article 5 (2) of Regulation No 1697/79, do goods originating in the German Democratic Republic which have been introduced into the Federal Republic of Germany via a Member State other than Germany by way of the external Community transit procedure fall within the ambit of German internal trade within the meaning of the Protocol on German internal trade and connected problems of 25 March 1957, with the consequence that when they are imported into the Federal Republic of Germany they are liable neither to customs duties nor to import turnover tax, or are such charges to be levied as in the case of imports from non-member countries, so that Community customs duties, in accordance with the relevant customs legislation, and import turnover tax, in accordance with Article 2 (2) of the Sixth Council Directive on the harmonization of turnover taxes in the European Communities, are to be levied?'

10 Reference is made to the Report for the Hearing for a fuller description of the facts and of the applicable provisions of Community law and for an account of the observations submitted by Foto-Frost, Hauptzollamt Lübeck-Ost, the Government of the Federal Republic of Germany and the Commission.

The first question

11 In its first question the Finanzgericht asks whether it itself is competent to declare invalid a Commission decision such as the decision of 6 May 1983. It casts doubt on the validity of that decision on the ground that all the requirements laid down by Article 5 (2) of Regulation No 1697/79 for taking no action for the post-clearance recovery of duty seem to be fulfilled in this case. However, it considers that in view of the division of jurisdiction between the Court of Justice and the national courts set out in Article 177 of the EEC Treaty only the Court of Justice is competent to declare invalid acts of the Community institutions.

12 Article 177 confers on the Court jurisdiction to give preliminary rulings on the interpretation of the Treaty and of acts of the Community institutions and on the validity of such acts. The second paragraph of that Article provides that national courts may refer such questions to the Court and the third paragraph of that article puts them under an obligation to do so where there is no judicial remedy under national law against their decisions.

13 In enabling national courts, against those decisions where there is a judicial remedy under national law, to refer to the Court for a preliminary ruling questions on interpretation or validity, Article 177 did not settle the question whether those courts themselves may declare that acts of Community institutions are invalid.

14 Those courts may consider the validity of a Community act and, if they consider that the grounds put forward before them by the parties in support of invalidity are unfounded, they may reject them, concluding that the measure is completely valid. By taking that action they are not calling into question the existence of the Community measure.

15 On the other hand, those courts do not have the power to declare acts of the Community institutions invalid. As the Court emphasized in the judgment of 13 May 1981 in Case 66/80 *International Chemical Corporation v Amministrazione delle Finanze* [1981] ECR 1191, the main purpose of the powers accorded to the Court by Article 177 is to ensure that Community law is applied uniformly by national courts. That requirement of uniformity is particularly imperative when the validity of a Community act is in question. Divergences between courts in the Member States as to the validity of Community acts would be liable to place in jeopardy the very unity of the Community legal order and detract from the fundamental requirement of legal certainty.

16 The same conclusion is dictated by consideration of the necessary coherence of the system of judicial protection established by the Treaty. In that regard it must be observed that requests for preliminary rulings, like actions for annulment, constitute means for reviewing the legality of acts of the Community institutions. As the Court pointed out in its judgment of 23 April 1986 in Case 294/83 *Parti écologiste 'les Verts' v European Parliament* [1986] ECR 1339), 'in Articles 173 and 184, on the one hand, and in Article 177, on the other, the Treaty established a complete system of legal remedies and procedures designed to permit the Court of Justice to review the legality of measures adopted by the institutions'.

17 Since Article 173 gives the Court exclusive jurisdiction to declare void an act of a Community institution, the coherence of the system requires that where the validity of a Community act is challenged before a national court the power to declare the act invalid must also be reserved to the Court of Justice.

18 It must also be emphasized that the Court of Justice is in the best position to decide on the validity of Community acts. Under Article 20 of the Protocol on the Statute of the Court of Justice of the EEC, Community institutions whose acts are challenged are entitled to participate in the proceedings in order to defend the validity of the acts in question. Furthermore, under the second paragraph of Article 21 of that Protocol the Court may require the Member States and institutions which are not participating in the proceedings to supply all information which it considers necessary for the purposes of the case before it.

19 It should be added that the rule that national courts may not themselves declare Community acts invalid may have to be qualified in certain circumstances in the case of proceedings relating to an application for interim measures; however, that case is not referred to in the national court's question.

20 The answer to the first question must therefore be that the national courts have no jurisdiction themselves to declare that acts of Community institutions are invalid.

The second question

21 The second and third questions assume that the operations in question are in fact liable to customs duties. In its second question the Finanzgericht is seeking to ascertain, in the event that the Court alone has jurisdiction to review the validity of the Commission decision, whether that decision is valid.

22 It must be observed that Article 5 (2) of Regulation No 1697/79 lays down three specific requirements which must be fulfilled before the competent authorities may waive the post-clearance recovery of duties. That provision must be interpreted as meaning that if all those requirements are fulfilled the person liable is entitled to the waiver of the recovery of the duty in question.

23 It now falls to be considered whether the three requirements set out in Article 5 (2) of Regulation No 1697/79 are fulfilled in this case. The Court has the power to verify the existence of the facts on which a Community act is based and the legal inferences which the Community institution has drawn therefrom where, in the context of a request for a preliminary ruling, they are alleged to be incorrect.

24 The first requirement contained in Article 5 (2) is that the failure to collect the duty must have been the result of an error made by the competent authorities themselves. In that regard, the Commission's argument to the effect that the customs authorities did not make an error themselves but merely made the initial assumption that the particulars given in Foto-Frost's declaration were correct, as they were entitled to do under Article 10 of Council Directive 79/695/EEC, must be rejected. According to the latter provision, where duty has been calculated on the basis of non-verified particulars given in the customs declaration, the declaration may be subjected to subsequent verification and the amount of duty calculated rectified. In this case, as the Commission itself acknowledged in its observations and in answering a question put to it by the Court, Foto-Frost's declaration contained all the factual particulars needed in order to apply the relevant rules, and those particulars were correct. In those circumstances, the post-clearance check carried out by the German customs authorities failed to disclose any new fact. Therefore, it was in fact as a result of an error made by the customs authorities themselves in initially applying the relevant rules that duty was not charged

when the goods were imported.

25 The second requirement is that the person liable must have acted in good faith or, in other words, that he could not have detected the error made by the competent authorities. In that connection, it is observed that the specialist judges of the Finanzgericht Hamburg expressed the view in their order of 22 September 1983 suspending the operation of the amendment notice that it was very doubtful whether duty was payable on operations of the type at issue. The Finanzgericht considered that such operations appeared to fall within the ambit of German internal trade and were therefore exempt from customs duty under the Protocol on such trade. However, it observed that the situation was uncertain as regards the case-law of both the Court of Justice and the national courts. In those circumstances, it cannot reasonably be considered that Foto-Frost, a commercial undertaking, could have detected the error made by the customs authorities. Moreover, it had even less reason to suspect that an error had been made, since previous similar operations had been granted exemption from duty.

26 The third requirement is that the person liable must have observed all the provisions laid down by the rules in force as far as his customs declaration is concerned. As to that point, it must be observed that, in answering a question put to it by the Court, the Commission itself admitted, contrary to what is stated in its decision of 6 May 1983, that Foto-Frost had completed its customs declaration correctly. Moreover, there is nothing in the documents before the Court to suggest that that was not the case.

27 It follows from the foregoing that all the requirements laid down in Article 5 (2) of Regulation No 1697/79 were fulfilled in this case and therefore Foto-Frost was entitled to the waiver of the post-clearance recovery of the duty in question.

28 Accordingly, the decision addressed to the Federal Republic of Germany on 6 May 1983 in which the Commission stated that post-clearance recovery of import duties must be carried out in a particular case is invalid.

The third question

29 The Finanzgericht asks whether, in the event that it itself is competent to declare the Commission's decision invalid, the application of Article 5 (2) of Regulation No 1697/79 depends on a discretionary decision which the national court may review only as regards abuses of that discretion ('Ermessensfehler') or on a measure of equitable relief, which is fully subject to review by that court?

30 In view of the answers given to the first and second questions, the third question does not call for a reply.

The fourth question

31 The fourth question is put to the Court in the event that it does not emerge from the answers to the first questions that Foto-Frost is entitled to the waiver of post-clearance recovery. The Finanzgericht asks whether in that case the operations in question fall within the ambit of German internal trade within the meaning of the Protocol on German internal trade, which would mean, in its view, that they are exempt from customs duty.

32 In view of the answer given to the second question, the fourth question does not call for a reply.

Costs

33 The costs incurred by the Government of the Federal Republic of Germany and the Commission of the European Communities, which have submitted observations to the Court are not recoverable. As these proceedings are, in so far as the parties to the main proceedings are concerned, in the nature of a step in the action pending before the national court, the decision on costs is a matter for that court.

on those grounds,

THE COURT,

in answer to questions submitted to it by the Finanzgericht, Hamburg, by order of 29 August 1985, hereby rules:

(1) The national courts have no jurisdiction themselves to declare that measures taken by Community institutions are invalid.

(2) The decision addressed to the Federal Republic of Germany on 6 May 1983 in which the Commission stated that post-clearance recovery of import duties must be carried out in a particular case is invalid.

Mackenzie Stuart
Bosco
Moitinho de Almeida
Rodríguez Iglesias
Koopmans
Everling
Bahlmann
Galmot
Joliet
O'Higgins
Schockweiler

Delivered in open court in Luxembourg on 22 October 1987.

P. Heim
Registrar

For the President A. J. Mackenzie Stuart
G. Bosco
acting as President

* Language of the Case: German

61986J0222

Judgment of the Court of 15 October 1987. - Union nationale des entraîneurs et cadres techniques professionnels du football (Unectef) v Georges Heylens and others. - Reference for a preliminary ruling: Tribunal de grande instance de Lille - France. - Free movement of workers - Equivalence of diplomas - Sports trainer. - Case 222/86.

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Keywords

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1 . FREE MOVEMENT OF PERSONS - WORKERS - RECOGNITION OF DIPLOMAS - ABSENCE OF HARMONIZING DIRECTIVES - DUTY OF THE MEMBER STATES TO ENSURE THE FREE MOVEMENT OF WORKERS UNDER THEIR LEGISLATION ON THE EQUIVALENCE OF DIPLOMAS - CRITERIA FOR ASSESSING EQUIVALENCE

(EEC TREATY, ARTS 5 AND 48)

2 . FREE MOVEMENT OF PERSONS - WORKERS - FREE ACCESS TO EMPLOYMENT - FUNDAMENTAL RIGHT LAID DOWN IN THE TREATY - DECISION OF A NATIONAL AUTHORITY REFUSING THE BENEFIT OF THAT RIGHT - SUBJECT TO JUDICIAL PROCEEDINGS - REQUIREMENT STEMMING FROM A GENERAL PRINCIPLE OF COMMUNITY LAW

(EEC TREATY, ART . 48)

3 . FREE MOVEMENT OF PERSONS - WORKERS - RECOGNITION OF DIPLOMAS - ABSENCE OF HARMONIZING DIRECTIVES - DECISION OF A NATIONAL AUTHORITY REFUSING TO GRANT RECOGNITION - DUTY TO STATE REASONS - SUBJECT TO JUDICIAL PROCEEDINGS

(EEC TREATY, ART . 48)

Summary

1 . THE LAWFUL REQUIREMENT WHEREBY, IN THE VARIOUS MEMBER STATES, ADMISSION TO CERTAIN OCCUPATIONS IS SUBJECTED TO THE POSSESSION OF DIPLOMAS CONSTITUTES A RESTRICTION ON THE EFFECTIVE EXERCISE OF THE FREEDOM OF ESTABLISHMENT GUARANTEED BY THE TREATY THE ABOLITION OF WHICH IS TO BE MADE EASIER BY DIRECTIVES FOR THE MUTUAL RECOGNITION OF DIPLOMAS, CERTIFICATES AND OTHER EVIDENCE OF FORMAL QUALIFICATIONS . IN VIEW OF THE REQUIREMENTS OF ARTICLE 5 OF THE TREATY, THE FACT THAT SUCH DIRECTIVES HAVE NOT YET BEEN ADOPTED DOES NOT ENTITLE A MEMBER STATE TO DENY THE PRACTICAL BENEFIT OF THAT FREEDOM TO A PERSON SUBJECT TO COMMUNITY LAW WHEN THAT FREEDOM CAN BE ENSURED IN THAT MEMBER STATE, IN PARTICULAR BECAUSE IT IS POSSIBLE UNDER ITS LAWS AND REGULATIONS FOR EQUIVALENT

FOREIGN DIPLOMAS TO BE RECOGNIZED .

SINCE IT HAS TO RECONCILE THE REQUIREMENT AS TO THE QUALIFICATIONS NECESSARY IN ORDER TO EXERCISE A PARTICULAR OCCUPATION WITH THE REQUIREMENTS OF THE FREE MOVEMENT OF WORKERS, THE PROCEDURE FOR THE RECOGNITION OF EQUIVALENCE MUST ENABLE THE NATIONAL AUTHORITIES TO ASSURE THEMSELVES, ON AN OBJECTIVE BASIS, THAT THE FOREIGN DIPLOMA CERTIFIES THAT ITS HOLDER HAS KNOWLEDGE AND QUALIFICATIONS WHICH ARE, IF NOT IDENTICAL, AT LEAST EQUIVALENT TO THOSE CERTIFIED BY THE NATIONAL DIPLOMA . THAT ASSESSMENT OF THE EQUIVALENCE OF THE FOREIGN DIPLOMA MUST BE EFFECTED EXCLUSIVELY IN THE LIGHT OF THE LEVEL OF KNOWLEDGE AND QUALIFICATIONS WHICH ITS HOLDER CAN BE ASSUMED TO POSSESS IN THE LIGHT OF THAT DIPLOMA, HAVING REGARD TO THE NATURE AND DURATION OF THE STUDIES AND PRACTICAL TRAINING WHICH THE DIPLOMA CERTIFIES THAT HE HAS CARRIED OUT .

2 . SINCE FREE ACCESS TO EMPLOYMENT IS A FUNDAMENTAL RIGHT WHICH THE TREATY CONFERS INDIVIDUALLY ON EACH MIGRANT WORKER IN THE COMMUNITY, THE EXISTENCE OF A REMEDY OF A JUDICIAL NATURE AGAINST ANY DECISION OF A NATIONAL AUTHORITY REFUSING THE BENEFIT OF THAT RIGHT IS ESSENTIAL IN ORDER TO SECURE FOR THE INDIVIDUAL EFFECTIVE PROTECTION FOR HIS RIGHT . THAT REQUIREMENT REFLECTS A GENERAL PRINCIPLE OF COMMUNITY LAW WHICH STEMS FROM THE CONSTITUTIONAL TRADITIONS COMMON TO THE MEMBER STATES AND HAS BEEN ENSHRINED IN ARTICLES 6 AND 13 OF THE EUROPEAN CONVENTION FOR THE PROTECTION OF HUMAN RIGHTS .

3 . WHERE IN A MEMBER STATE ACCESS TO AN OCCUPATION AS AN EMPLOYED PERSON IS DEPENDENT UPON THE POSSESSION OF A NATIONAL DIPLOMA OR A FOREIGN DIPLOMA RECOGNIZED AS EQUIVALENT THERETO, THE PRINCIPLE OF THE FREE MOVEMENT OF WORKERS LAID DOWN IN ARTICLE 48 OF THE TREATY REQUIRES THAT IT MUST BE POSSIBLE FOR A DECISION REFUSING TO RECOGNIZE THE EQUIVALENCE OF A DIPLOMA GRANTED TO A WORKER WHO IS A NATIONAL OF ANOTHER MEMBER STATE BY THAT MEMBER STATE TO BE MADE THE SUBJECT OF JUDICIAL PROCEEDINGS IN WHICH ITS LEGALITY UNDER COMMUNITY LAW CAN BE REVIEWED, AND FOR THE PERSON CONCERNED TO ASCERTAIN THE REASONS FOR THE DECISION .

Parties

IN CASE 222/86

REFERENCE TO THE COURT UNDER ARTICLE 177 OF THE EEC TREATY BY THE TRIBUNAL DE GRANDE INSTANCE (REGIONAL COURT), LILLE, (EIGHTH CRIMINAL CHAMBER) FOR A PRELIMINARY RULING IN THE PROCEEDINGS PENDING BEFORE THAT COURT BETWEEN

UNION NATIONALE DES ENTRAINEURS ET CADRES TECHNIQUES PROFESSIONNELS DU FOOTFALL (UNECTEF), A TRADE UNION HAVING ITS REGISTERED OFFICE IN PARIS, ON THE ONE HAND,

AND

GEORGES HEYLENS, A FOOTBALL TRAINER, RESIDING AT LA MADELEINE (FRANCE),

JACQUES DEWAILLY, PRESIDENT AND MANAGING DIRECTOR OF THE LILLE OLYMPIC SPORTING CLUB, A SOCIETE ANONYME D' ECONOMIE MIXTE, RESIDING AT VILLENEUVE-D' ASCQ (FRANCE),

JACQUES AMYOT, ALSO A DIRECTOR OF THE LILLE OLYMPIC SPORTING CLUB, RESIDING AT TEMPLEMARS (FRANCE), AND

ROGER DESCHOD, ALSO A DIRECTOR OF THE LILLE OLYMPIC SPORTING CLUB, RESIDING AT FACHES-THUMESNIL (FRANCE), ON THE OTHER HAND,

ON THE INTERPRETATION OF ARTICLE 48 OF THE EEC TREATY,

THE COURT

COMPOSED OF : LORD MACKENZIE STUART, PRESIDENT, G . BOSCO, O . DUE, J . C . MOITINHO DE ALMEIDA AND G . C . RODRIGUEZ IGLESIAS (PRESIDENTS OF CHAMBERS), T . KOOPMANS, U . EVERLING, K . BAHLMANN, Y . GALMOT, C . KAKOURIS, R . JOLIET, T . F . O' HIGGINS AND F . SCHOCKWEILER, JUDGES,

ADVOCATE GENERAL : G . F . MANCINI

REGISTRAR : J . A . POMPE, DEPUTY REGISTRAR

AFTER CONSIDERING THE OBSERVATIONS SUBMITTED ON BEHALF OF

UNION NATIONALE DES ENTRAINEURS ET CADRES TECHNIQUES PROFESSIONNELS DU FOOTBALL (UNECTEF), THE PRIVATE PROSECUTOR IN THE MAIN PROCEEDINGS, BY J . J . BERTRAND IN THE WRITTEN AND IN THE ORAL PROCEEDINGS;

GEORGES HEYLENS, JACQUES DEWAILLY, JACQUES AMYOT AND ROGER DESCHODT, THE DEFENDANTS IN THE MAIN PROCEEDINGS, BY G . DOUSSOT IN THE WRITTEN AND IN THE ORAL PROCEEDINGS;

THE GOVERNMENT OF THE FRENCH REPUBLIC, BY G . GUILLAUME IN THE WRITTEN PROCEEDINGS;

THE GOVERNMENT OF THE KINGDOM OF DENMARK, BY L . MIKAELSEN IN THE WRITTEN PROCEEDINGS AND JOERGEN MOLDE, LEGAL ADVISER IN THE MINISTRY FOR FOREIGN AFFAIRS, IN THE ORAL PROCEEDINGS;

THE COMMISSION OF THE EUROPEAN COMMUNITIES, BY J . GRIESMAR IN THE WRITTEN PROCEEDINGS AND IN THE ORAL PROCEEDINGS;

HAVING REGARD TO THE REPORT FOR THE HEARING AS SUPPLEMENTED FURTHER TO THE HEARING ON 31 MARCH 1987,

AFTER HEARING THE OPINION OF THE ADVOCATE GENERAL DELIVERED AT THE SITTING ON 18 JUNE 1987,

GIVES THE FOLLOWING

JUDGMENT

Grounds

1 BY JUDGMENT OF 4 JULY 1986, LODGED AT THE COURT REGISTRY ON 18 AUGUST 1986, THE TRIBUNAL DE GRANDE INSTANCE (REGIONAL COURT), LILLE, REFERRED TO THE COURT FOR A PRELIMINARY RULING PURSUANT TO ARTICLE 177 OF THE EEC TREATY A QUESTION ON THE INTERPRETATION OF ARTICLE 48 OF THE EEC TREATY .

2 THAT QUESTION WAS RAISED IN THE CRIMINAL PROCEEDINGS FOLLOWING THE PRIVATE PROSECUTION BROUGHT BY UNION NATIONALE DES ENTRAINEURS ET CADRES TECHNIQUES PROFESSIONELS DU FOOTBALL AGAINST GEORGES HEYLENS, A FOOTBALL TRAINER, AND JACQUES DEWAILLY, JACQUES AMYOT AND ROGER DESCHODT, DIRECTORS OF THE LILLE OLYMPIC SPORTING CLUB, A SOCIETE ANONYME D' ECONOMIE MIXTE, AS PRINCIPAL AND ACCESSORIES, RESPECTIVELY, FOR HAVING INFRINGED THE PROVISIONS OF FRENCH LAW NO 84-610 OF 16 JULY 1984 ON THE ORGANIZATION AND PROMOTION OF PHYSICAL AND SPORTING ACTIVITIES (JOURNAL OFFICIEL DE LA REPUBLIQUE FRANCAISE OF 17.7.1984) AND ARTICLE 259 OF THE CRIMINAL CODE WITH REGARD TO THE WRONGFUL ASSUMPTION OF A TITLE .

3 IT APPEARS FROM THE DOCUMENTS BEFORE THE COURT THAT IN ORDER TO PRACTISE THE OCCUPATION OF FOOTBALL TRAINER IN FRANCE A PERSON MUST BE THE HOLDER OF A FRENCH FOOTBALL-TRAINER' S DIPLOMA OR A FOREIGN DIPLOMA WHICH HAS BEEN RECOGNIZED AS EQUIVALENT BY DECISION OF THE COMPETENT MEMBER OF THE GOVERNMENT AFTER CONSULTING A SPECIAL COMMITTEE .

4 THE DEFENDANT IN THE MAIN PROCEEDINGS, GEORGES HEYLENS, IS A BELGIAN NATIONAL AND THE HOLDER OF A BELGIAN FOOTBALL-TRAINER' S DIPLOMA AND WAS ENGAGED BY THE LILLE OLYMPIC SPORTING CLUB AS TRAINER OF THE CLUB' S PROFESSIONAL FOOTBALL TEAM . AN APPLICATION FOR RECOGNITION OF THE EQUIVALENCE OF THE BELGIAN DIPLOMA WAS REJECTED BY DECISION OF THE COMPETENT MEMBER OF THE GOVERNMENT, WHICH REFERRED, BY WAY OF STATEMENT OF REASONS, TO AN ADVERSE OPINION OF THE SPECIAL COMMITTEE, WHICH ITSELF CONTAINED NO STATEMENT OF REASONS . SINCE MR HEYLENS CONTINUED TO PRACTISE AS A FOOTBALL TRAINER, THE FRENCH FOOTBALL-TRAINERS' TRADE UNION SUMMONED HIM AND THE DIRECTORS OF THE FOOTBALL CLUB WHICH HAD ENGAGED HIM BEFORE THE LILLE CRIMINAL COURT .

5 SINCE IT HAD DOUBTS ABOUT THE COMPATIBILITY OF THE FRENCH LEGISLATION WITH THE RULES ON THE FREE MOVEMENT OF WORKERS, THE TRIBUNAL DE GRANDE INSTANCE DE LILLE (

EIGHTH CRIMINAL CHAMBER) SUSPENDED THE PROCEEDINGS UNTIL THE COURT HAD DELIVERED A PRELIMINARY RULING ON THE FOLLOWING QUESTION :

"DOES THE REQUIREMENT THAT A PERSON WISHING TO PURSUE A GAINFUL OCCUPATION AS TRAINER OF A SPORTS TEAM (ARTICLE 43 OF THE LAW OF 16 JULY 1984) MUST HOLD A FRENCH DIPLOMA OR A FOREIGN DIPLOMA RECOGNIZED AS EQUIVALENT THERETO BY A COMMITTEE WHOSE RULINGS DO NOT STATE THE REASONS ON WHICH THEY ARE BASED AND AGAINST WHOSE DECISIONS NO SPECIFIC LEGAL REMEDY IS AVAILABLE CONSTITUTE A RESTRICTION ON FREEDOM OF MOVEMENT FOR WORKERS AS DEFINED BY ARTICLES 48 TO 51 OF THE EEC TREATY, IN THE ABSENCE OF ANY DIRECTIVE APPLICABLE TO THAT OCCUPATION?"

6 REFERENCE IS MADE TO THE REPORT FOR THE HEARING FOR A FULLER ACCOUNT OF THE FACTS OF THE CASE, THE COURSE OF THE PROCEDURE AND THE OBSERVATIONS SUBMITTED PURSUANT TO ARTICLE 20 OF THE PROTOCOL ON THE STATUTE OF THE COURT OF JUSTICE OF THE EEC, WHICH ARE MENTIONED OR DISCUSSED HEREINAFTER ONLY IN SO FAR AS IS NECESSARY FOR THE REASONING OF THE COURT .

7 THE QUESTION PUT BY THE NATIONAL COURT ESSENTIALLY SEEKS TO ESTABLISH WHETHER, WHERE IN A MEMBER STATE ACCESS TO AN OCCUPATION AS AN EMPLOYED PERSON IS DEPENDENT UPON THE POSSESSION OF A NATIONAL DIPLOMA OR A FOREIGN DIPLOMA RECOGNIZED AS EQUIVALENT THERETO, THE PRINCIPLE OF THE FREE MOVEMENT OF WORKERS LAID DOWN IN ARTICLE 48 OF THE TREATY REQUIRES THAT IT MUST BE POSSIBLE FOR A DECISION REFUSING TO RECOGNIZE THE EQUIVALENCE OF A DIPLOMA GRANTED TO A WORKER WHO IS A NATIONAL OF ANOTHER MEMBER STATE BY THAT MEMBER STATE TO BE MADE THE SUBJECT OF JUDICIAL PROCEEDINGS, AND THAT THE DECISION MUST STATE THE REASONS ON WHICH IT IS BASED .

8 IN ORDER TO ANSWER THAT QUESTION IT MUST BE BORNE IN MIND THAT ARTICLE 48 OF THE TREATY IMPLEMENTS, WITH REGARD TO WORKERS, A FUNDAMENTAL PRINCIPLE CONTAINED IN ARTICLE 3*(C) OF THE TREATY, WHICH STATES THAT, FOR THE PURPOSES SET OUT IN ARTICLE 2, THE ACTIVITIES OF THE COMMUNITY ARE TO INCLUDE THE ABOLITION, AS BETWEEN MEMBER STATES, OF OBSTACLES TO FREEDOM OF MOVEMENT FOR PERSONS AND SERVICES (SEE THE JUDGMENT OF 7 JULY 1976 IN CASE 118/75 WATSON AND BELMANN ((1976)) ECR 1185).

9 IN APPLICATION OF THE GENERAL PRINCIPLE SET OUT IN ARTICLE 7 OF THE TREATY UNDER WHICH DISCRIMINATION ON GROUNDS OF NATIONALITY IS PROHIBITED, ARTICLE 48 AIMS TO ELIMINATE IN THE LEGISLATION OF THE MEMBER STATES PROVISIONS AS REGARDS EMPLOYMENT, REMUNERATION AND OTHER CONDITIONS OF WORK AND EMPLOYMENT UNDER WHICH A WORKER WHO IS A NATIONAL OF ANOTHER MEMBER STATE IS SUBJECT TO MORE SEVERE TREATMENT OR IS PLACED IN AN UNFAVOURABLE SITUATION IN LAW OR IN FACT AS COMPARED WITH THE SITUATION OF A NATIONAL IN THE SAME CIRCUMSTANCES (SEE THE JUDGMENT OF 28 MARCH 1979 IN CASE 175/78 SAUNDERS ((1979)) ECR 1129).

10 IN THE ABSENCE OF HARMONIZATION OF THE CONDITIONS OF ACCESS TO A PARTICULAR OCCUPATION, THE MEMBER STATES ARE ENTITLED TO LAY DOWN THE KNOWLEDGE AND QUALIFICATIONS NEEDED IN ORDER TO PURSUE IT AND TO REQUIRE THE PRODUCTION OF A DIPLOMA CERTIFYING THAT THE HOLDER HAS THE RELEVANT KNOWLEDGE AND QUALIFICATIONS .

11 HOWEVER, AS THE COURT HELD IN ITS JUDGMENT OF 28 JUNE 1977 IN CASE 11/77 PATRICK V MINISTRE DES AFFAIRES CULTURELLES ((1977)) ECR 1199, THE LAWFUL REQUIREMENT, IN THE VARIOUS MEMBER STATES, RELATING TO THE POSSESSION OF DIPLOMAS FOR ADMISSION TO CERTAIN OCCUPATIONS CONSTITUTES A RESTRICTION ON THE EFFECTIVE EXERCISE OF THE FREEDOM OF ESTABLISHMENT GUARANTEED BY THE TREATY THE ABOLITION OF WHICH IS TO BE MADE EASIER BY DIRECTIVES FOR THE MUTUAL RECOGNITION OF DIPLOMAS, CERTIFICATES AND OTHER EVIDENCE OF FORMAL QUALIFICATIONS . AS THE COURT ALSO HELD IN THAT JUDGMENT, THE FACT THAT SUCH DIRECTIVES HAVE NOT YET BEEN ISSUED DOES NOT ENTITLE A MEMBER STATE TO DENY THE PRACTICAL BENEFIT OF THAT FREEDOM TO A PERSON SUBJECT TO COMMUNITY LAW WHEN THAT FREEDOM CAN BE ENSURED IN THAT MEMBER STATE, IN PARTICULAR BECAUSE IT IS POSSIBLE UNDER ITS LAWS AND REGULATIONS FOR EQUIVALENT FOREIGN DIPLOMAS TO BE RECOGNIZED .

12 SINCE FREEDOM OF MOVEMENT FOR WORKERS IS ONE OF THE FUNDAMENTAL OJECTIVES OF THE TREATY, THE REQUIREMENT TO SECURE FREE MOVEMENT UNDER EXISTING NATIONAL LAWS AND REGULATIONS STEMS, AS THE COURT HELD IN ITS JUDGMENT OF 28 APRIL 1977 IN

CASE 71/76 THIEFFRY ((1977)) ECR 765, FROM ARTICLE 5 OF THE TREATY, UNDER WHICH THE MEMBER STATES ARE BOUND TO TAKE ALL APPROPRIATE MEASURES, WHETHER GENERAL OR PARTICULAR, TO ENSURE FULFILMENT OF THE OBLIGATIONS ARISING OUT OF THE TREATY AND TO ABSTAIN FROM ANY MEASURE WHICH COULD JEOPARDIZE THE ATTAINMENT OF THE OBJECTIVES OF THE TREATY .

13 SINCE IT HAS TO RECONCILE THE REQUIREMENT AS TO THE QUALIFICATIONS NECESSARY IN ORDER TO PURSUE A PARTICULAR OCCUPATION WITH THE REQUIREMENTS OF THE FREE MOVEMENT OF WORKERS, THE PROCEDURE FOR THE RECOGNITION OF EQUIVALENCE MUST ENABLE THE NATIONAL AUTHORITIES TO ASSURE THEMSELVES, ON AN OBJECTIVE BASIS, THAT THE FOREIGN DIPLOMA CERTIFIES THAT ITS HOLDER HAS KNOWLEDGE AND QUALIFICATIONS WHICH ARE, IF NOT IDENTICAL, AT LEAST EQUIVALENT TO THOSE CERTIFIED BY THE NATIONAL DIPLOMA . THAT ASSESSMENT OF THE EQUIVALENCE OF THE FOREIGN DIPLOMA MUST BE EFFECTED EXCLUSIVELY IN THE LIGHT OF THE LEVEL OF KNOWLEDGE AND QUALIFICATIONS WHICH ITS HOLDER CAN BE ASSUMED TO POSSESS IN THE LIGHT OF THAT DIPLOMA, HAVING REGARD TO THE NATURE AND DURATION OF THE STUDIES AND PRACTICAL TRAINING WHICH THE DIPLOMA CERTIFIES THAT HE HAS CARRIED OUT .

14 SINCE FREE ACCESS TO EMPLOYMENT IS A FUNDAMENTAL RIGHT WHICH THE TREATY CONFERS INDIVIDUALLY ON EACH WORKER IN THE COMMUNITY, THE EXISTENCE OF A REMEDY OF A JUDICIAL NATURE AGAINST ANY DECISION OF A NATIONAL AUTHORITY REFUSING THE BENEFIT OF THAT RIGHT IS ESSENTIAL IN ORDER TO SECURE FOR THE INDIVIDUAL EFFECTIVE PROTECTION FOR HIS RIGHT . AS THE COURT HELD IN ITS JUDGMENT OF 15 MAY 1986 IN CASE 222/84 JOHNSTON V CHIEF CONSTABLE OF THE ROYAL ULSTER CONSTABULARY ((1986)) ECR 1651, AT P . 1663, THAT REQUIREMENT REFLECTS A GENERAL PRINCIPLE OF COMMUNITY LAW WHICH UNDERLIES THE CONSTITUTIONAL TRADITIONS COMMON TO THE MEMBER STATES AND HAS BEEN ENSHRINED IN ARTICLES 6 AND 13 OF THE EUROPEAN CONVENTION FOR THE PROTECTION OF HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS .

15 EFFECTIVE JUDICIAL REVIEW, WHICH MUST BE ABLE TO COVER THE LEGALITY OF THE REASONS FOR THE CONTESTED DECISION, PRESUPPOSES IN GENERAL THAT THE COURT TO WHICH THE MATTER IS REFERRED MAY REQUIRE THE COMPETENT AUTHORITY TO NOTIFY ITS REASONS . BUT WHERE, AS IN THIS CASE, IT IS MORE PARTICULARLY A QUESTION OF SECURING THE EFFECTIVE PROTECTION OF A FUNDAMENTAL RIGHT CONFERRED BY THE TREATY ON COMMUNITY WORKERS, THE LATTER MUST ALSO BE ABLE TO DEFEND THAT RIGHT UNDER THE BEST POSSIBLE CONDITIONS AND HAVE THE POSSIBILITY OF DECIDING, WITH A FULL KNOWLEDGE OF THE RELEVANT FACTS, WHETHER THERE IS ANY POINT IN THEIR APPLYING TO THE COURTS . CONSEQUENTLY, IN SUCH CIRCUMSTANCES THE COMPETENT NATIONAL AUTHORITY IS UNDER A DUTY TO INFORM THEM OF THE REASONS ON WHICH ITS REFUSAL IS BASED, EITHER IN THE DECISION ITSELF OR IN A SUBSEQUENT COMMUNICATION MADE AT THEIR REQUEST .

16 IN VIEW OF THEIR AIMS THOSE REQUIREMENTS OF COMMUNITY LAW, THAT IS TO SAY, THE EXISTENCE OF A JUDICIAL REMEDY AND THE DUTY TO STATE REASONS, ARE HOWEVER LIMITED ONLY TO FINAL DECISIONS REFUSING TO RECOGNIZE EQUIVALENCE AND DO NOT EXTEND TO OPINIONS AND OTHER MEASURES OCCURRING IN THE PREPARATION AND INVESTIGATION STAGE .

17 CONSEQUENTLY, THE ANSWER TO THE QUESTION PUT BY THE TRIBUNAL DE GRANDE INSTANCE, LILLE, MUST BE THAT WHERE IN A MEMBER STATE ACCESS TO AN OCCUPATION AS AN EMPLOYED PERSON IS DEPENDENT UPON THE POSSESSION OF A NATIONAL DIPLOMA OR A FOREIGN DIPLOMA RECOGNIZED AS EQUIVALENT THERETO, THE PRINCIPLE OF THE FREE MOVEMENT OF WORKERS LAID DOWN IN ARTICLE 48 OF THE TREATY REQUIRES THAT IT MUST BE POSSIBLE FOR A DECISION REFUSING TO RECOGNIZE THE EQUIVALENCE OF A DIPLOMA GRANTED TO A WORKER WHO IS A NATIONAL OF ANOTHER MEMBER STATE BY THAT MEMBER STATE TO BE MADE THE SUBJECT OF JUDICIAL PROCEEDINGS IN WHICH ITS LEGALITY UNDER COMMUNITY LAW CAN BE REVIEWED, AND FOR THE PERSON CONCERNED TO ASCERTAIN THE REASONS FOR THE DECISION .

Decision on costs

COSTS

18 THE COSTS INCURRED BY THE GOVERNMENT OF THE FRENCH REPUBLIC, THE GOVERNMENT OF THE KINGDOM OF DENMARK AND THE COMMISSION OF THE EUROPEAN COMMUNITIES, WHICH HAVE SUBMITTED OBSERVATIONS TO THE COURT, ARE NOT RECOVERABLE . AS THESE PROCEEDINGS ARE, IN SO FAR AS THE PARTIES TO THE MAIN PROCEEDINGS ARE CONCERNED, IN THE NATURE OF A STEP IN THE ACTION PENDING BEFORE THE NATIONAL COURT, THE DECISION ON COSTS IS A MATTER FOR THAT COURT .

Operative part

ON THOSE GROUNDS,

THE COURT,

IN ANSWER TO THE QUESTION REFERRED TO IT BY THE TRIBUNAL DE GRANDE INSTANCE, LILLE, BY JUDGMENT OF 4 JULY 1986, HEREBY RULES :

WHERE IN A MEMBER STATE ACCESS TO AN OCCUPATION AS AN EMPLOYED PERSON IS DEPENDENT UPON THE POSSESSION OF A NATIONAL DIPLOMA OR A FOREIGN DIPLOMA RECOGNIZED AS EQUIVALENT THERETO, THE PRINCIPLE OF THE FREE MOVEMENT OF WORKERS LAID DOWN IN ARTICLE 48 OF THE TREATY REQUIRES THAT IT MUST BE POSSIBLE FOR A DECISION REFUSING TO RECOGNIZE THE EQUIVALENCE OF A DIPLOMA GRANTED TO A WORKER WHO IS A NATIONAL OF ANOTHER MEMBER STATE BY THE MEMBER STATE TO BE MADE THE SUBJECT OF JUDICIAL PROCEEDINGS IN WHICH ITS LEGALITY UNDER COMMUNITY LAW CAN BE REVIEWED, AND FOR THE PERSON CONCERNED TO ASCERTAIN THE REASONS FOR THE DECISION .

61987J0247

Judgment of the Court (Second Chamber) of 14 February 1989. - Star Fruit Company SA v Commission of the European Communities. - Action for failure to act brought by an undertaking - Failure by the Commission to commence proceedings under Article 169 of the EEC Treaty. - Case 247/87.

European Court reports 1989 Page 00291

Keywords

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Action for failure to act - Natural or legal persons - Failures to act against which an action lies - Failure to commence proceedings for a breach of Treaty obligations - Inadmissibility

(EEC Treaty, Art . 169, second paragraph, and Art . 175, third paragraph)

Summary

An action for failure to act brought by a natural or legal person for a declaration that in not commencing against a Member State proceedings to establish its breach of obligations the Commission has, in breach of the Treaty, failed to take a decision .

First, it is clear from the scheme of Article 169 of the Treaty that the Commission is not obliged to commence proceedings under that provision but has a discretionary power in this regard which excludes the right of private individuals to require that institution to adopt a specific position .

Secondly, a natural or legal person who asks the Commission to commence proceedings pursuant to Article 169 is in fact seeking the adoption of acts which are not of direct and individual concern to him within the meaning of the second paragraph of Article 173 and which it could not therefore challenge by means of an action for annulment in any event .

Parties

In Case 247/87

Star Fruit Company SA, whose registered office is in Brussels, represented by J . Cloetens, of the Brussels Bar with an address for service in Luxembourg at the Chambers of P . Schleimer, 26 rue Philippe-II,

applicant,

v

Commission of the European Communities, represented by its Legal Adviser, M . J . Jonczy, acting

as Agent, with an address for service in Luxembourg at the office of Georgios Kremlis, a Member of its Legal Department, Wagner Centre, C 254, Luxembourg,

defendant,

supported by the

French Republic, represented by E . Belliard and Géraud de Bergues, acting as Agents, with an address for service in Luxembourg at the French Embassy,

intervener,

APPLICATION under Articles 173 and 175 of the EEC Treaty for a declaration that the Commission has failed to commence proceedings under Article 169 of the Treaty to establish the French Republic' s failure to fulfil its obligations,

THE COURT (Second Chamber)

composed of : T . F . O' Higgins, President of the Chamber, G . F . Mancini and F . A . Schockweiler, Judges,

Advocate General : C . O . Lenz

Registrar : D . Louterman, Administrator

having regard to the Report for the Hearing and further to the hearing on 30 November 1988,

having heard the Opinion of the Advocate General delivered at the sitting on 14 December 1988,

gives the following

Judgment

Grounds

1 By application lodged at the Court Registry on 14 August 1987, the Belgian company Star Fruit Company, which specializes in the importation and exportation of fresh bananas, brought an action under the second paragraph of Article 173 and the third paragraph of Article 175 of the EEC Treaty essentially for a declaration that the Commission of the European Communities had failed to commence proceedings against the French Republic under Article 169 of the Treaty .

2 The applicant considers that the system for supplying the banana market in France is incompatible with Article 30 et seq . of the EEC Treaty and with Article 2 of the Lomé Convention of 28 February 1975 (Official Journal 1976, L 25, p . 1). It therefore requested the Commission, by letter of 17 April 1987, to commence proceedings under Article 169 of the EEC Treaty against the French Republic in order to determine that the system in question is incompatible with the aforementioned provisions, to call upon that Member State to abolish import quotas on bananas originating in non-member States which are in free circulation in the other Member States of the Community and to pay it compensation for the damage which it has allegedly suffered as a result of the impossibility of fulfilling the orders of its French customers and the loss of goods resulting from the import bans applied by the Member State in question .

3 By a letter dated 4 May 1987 the Commission acknowledged receipt of the applicant' s letter and informed it that it would adopt the measures needed in the matter .

4 It was after receiving that communication that the applicant brought this action .

5 By a separate document received at the Court on 9 November 1987 the Commission raised an objection of inadmissibility pursuant to Article 91 of the Rules of Procedure and requested the Court to rule on its objection without considering the substance of the case .

6 In support of its objection the Commission, supported on all points by the French Republic which was granted leave to intervene in support of its conclusions, contends in substance that the application is inadmissible under the second paragraph of Article 173 because the applicant has failed to specify the act of the Commission which it seeks to have declared void . The application is also inadmissible, in the Commission' s view, under the third paragraph of Article 175, the wording of which excludes the possibility of an action for failure to act being brought by a private individual for non-application of the procedure provided for in Article 169 against a Member State .

7 The applicant leaves it to the Court to decide whether its application is admissible under the second paragraph of Article 173 . It maintains that its application is admissible under the third

paragraph of Article 175 of the Treaty .

8 Reference is made to the Report for the Hearing for a fuller account of the facts of the case, the course of the procedure and the submissions and arguments of the parties, which are mentioned or discussed hereinafter only in so far as is necessary for the reasoning of the Court .

9 It appears that the applicant has not even identified the act adopted by the Commission against which the action is directed . Consequently, the application is inadmissible in so far as it is based on the second paragraph of Article 173 of the EEC Treaty .

10 In so far as it is based on the third paragraph of Article 175 of the Treaty, the purpose of the application is to obtain a declaration that in not commencing against the French Republic proceedings to establish its breach of obligations the Commission infringed the Treaty by failing to take a decision .

11 However, it is clear from the scheme of Article 169 of the Treaty that the Commission is not bound to commence the proceedings provided for in that provision but in this regard has a discretion which excludes the right for individuals to require that institution to adopt a specific position .

12 It is only if it considers that the Member State in question has failed to fulfil one of its obligations that the Commission delivers a reasoned opinion . Furthermore, in the event that the State does not comply with the opinion within the period allowed, the institution has in any event the right, but not the duty, to apply to the Court of Justice for a declaration that the alleged breach of obligations has occurred .

13 It must also be observed that in requesting the Commission to commence proceedings pursuant to Article 169 the applicant is in fact seeking the adoption of acts which are not of direct and individual concern to it within the meaning of the second paragraph of Article 173 and which it could not therefore challenge by means of an action for annulment in any event .

14 Consequently, the applicant cannot be entitled to raise the objection that the Commission failed to commence proceedings against the French Republic pursuant to Article 169 of the Treaty .

15 It follows that the application is inadmissible in its entirety .

Decision on costs

Costs

16 Under Article 69(2) of the Rules of Procedure the unsuccessful party must be ordered to pay the costs if they have been asked in the successful party' s pleadings .

17 Since the applicant has failed in its submissions, it must be ordered to pay the costs .

18 Since only the Commission has pleaded to that effect, the order for costs must be limited to those incurred by the Commission .

Operative part

On those grounds,

THE COURT (Second Chamber)

hereby :

(1) Dismisses the action as inadmissible;

(2) Orders the applicant to pay the costs incurred by the Commission;

(3) Orders the French Republic to bear its own costs .

61993J0415

Judgment of the Court of 15 December 1995. - Union royale belge des sociétés de football association ASBL v Jean-Marc Bosman, Royal club liégeois SA v Jean-Marc Bosman and others and Union des associations européennes de football (UEFA) v Jean-Marc Bosman. - Reference for a preliminary ruling: Cour d'appel de Liège - Belgium. - Freedom of movement for workers - Competition rules applicable to undertakings - Professional footballers - Sporting rules on the transfer of players requiring the new club to pay a fee to the old club - Limitation of the number of players having the nationality of other Member States who may be fielded in a match. - Case C-415/93.

European Court reports 1995 Page I-04921

Keywords

1. Procedure ° Request for measures of inquiry ° Request made after the close of the oral procedure ° Conditions for admissibility

(Rules of Procedure of the Court of Justice, Arts 59(2) and 60)

2. Preliminary rulings ° Jurisdiction of the Court ° Limits ° Manifestly irrelevant questions and hypothetical questions referred in circumstances in which a useful answer is precluded ° Jurisdiction to reply to questions raised in the context of declaratory proceedings permitted under national law

(EEC Treaty, Art. 177)

3. Community law ° Scope ° Sport as an economic activity ° Included

(EEC Treaty, Art. 2)

4. Freedom of movement for persons ° Workers ° Treaty provisions ° Conditions of application ° Existence of an employment relationship ° Employer not an undertaking ° Not relevant

(EEC Treaty, Art. 48)

5. Freedom of movement for persons ° Workers ° Treaty provisions ° Scope ° Rules governing business relationships between employers but affecting the terms of employment of workers ° Included

(EEC Treaty, Art. 48)

6. Freedom of movement for persons ° Workers ° Freedom of establishment ° Freedom to provide services ° Treaty provisions ° Scope ° Sporting activity ° Limits

(EEC Treaty, Arts 48, 52 and 59)

7. Freedom of movement for persons ° Workers ° Treaty provisions ° Scope ° Limitation in order to respect the diversity of national cultures as required by Article 128 of the EC Treaty ° Not possible

(EEC Treaty, Art. 48; EC Treaty, Art 128(1))

8. Community law ° Principles ° Fundamental rights ° Freedom of association ° Implications ° Right of sporting associations to lay down rules likely to restrict freedom of movement for

professional sportsmen ° Excluded

(Single European Act, preamble; Treaty on European Union, Art. F(2))

9. Community law ° Principles ° Principle of subsidiarity ° Scope ° Restriction on the exercise of rights conferred on individuals by the Treaty ° Excluded

10. Freedom of movement for persons ° Workers ° Treaty provisions ° Scope ° Rules aimed at regulating gainful employment in a collective manner but not emanating from a public authority ° Included

(EEC Treaty, Art. 48)

11. Freedom of movement for persons ° Workers ° Restrictions justified on grounds of public policy, public security or public health ° Grounds which may be relied on by any private individual or public body

(EEC Treaty, Art. 48)

12. Freedom of movement for persons ° Workers ° Treaty provisions ° Scope ° Rules laid down by sporting associations which determine the terms on which professional sportsmen can engage in gainful employment ° Included

(EEC Treaty, Art. 48)

13. Freedom of movement for persons ° Workers ° Treaty provisions ° Scope ° Professional sportsman who is a national of a Member State and has entered into a contract of employment with a club in another Member State with a view to exercising gainful employment in that State ° Included

(EEC Treaty, Art. 48)

14. Freedom of movement for persons ° Workers ° Rules laid down by sporting associations making the recruitment of a professional sportsman by a new employer in another Member State subject to the payment of a fee by the new employer to the old employer ° Not permissible ° Justification ° None

(EEC Treaty, Art. 48)

15. Freedom of movement for persons ° Workers ° Equal treatment ° Rules laid down by sporting associations limiting the participation of players who are nationals of other Member States in certain competitions ° Not permissible ° Justification ° None

(EEC Treaty, Art. 48)

16. Commission ° Powers ° Power to give guarantees concerning the compatibility of specific practices with the Treaty ° None unless specifically conferred ° Power to authorize practices contrary to the Treaty ° None

17. Preliminary rulings ° Interpretation ° Temporal effects of judgments ruling on interpretation ° Retroactive effect ° Limits ° Legal certainty ° Power of assessment of the Court

(EEC Treaty, Art. 177)

Summary

1. A request for the Court to order a measure of inquiry under Article 60 of the Rules of Procedure, made by a party after the close of the oral procedure, can be admitted only if it relates to facts which may have a decisive influence and which the party concerned could not put forward before the close of the oral procedure.

2. In the context of the cooperation between the Court of Justice and the national courts provided for by Article 177 of the Treaty, it is solely for the national court before which the dispute has been brought, and which must assume responsibility for the subsequent judicial decision, to determine in the light of the particular circumstances of the case both the need for a preliminary ruling in order to enable it to deliver judgment and the relevance of the questions which it submits to the Court. Consequently, where the questions submitted by the national court concern the interpretation of Community law, the Court of Justice is, in principle, bound to give a ruling

Nevertheless, in order to determine whether it has jurisdiction, the Court should examine the conditions in which the case was referred to it by the national court. The spirit of cooperation which must prevail in the preliminary-ruling procedure requires the national court, for its part, to

have regard to the function entrusted to the Court of Justice, which is to assist in the administration of justice in the Member States and not to deliver advisory opinions on general or hypothetical questions.

That is why the Court has no jurisdiction to give a preliminary ruling on a question submitted by a national court where it is quite obvious that the interpretation of Community law sought by that court bears no relation to the actual facts of the main action or its purpose or where the problem is hypothetical and the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it.

Questions submitted by a national court called upon to decide on declaratory actions seeking to prevent the infringement of a right which is seriously threatened are to be regarded as meeting an objective need for the purpose of settling the dispute brought before that court, even though they are necessarily based on hypotheses which are, by their nature, uncertain, if it holds them to be admissible under its interpretation of its national law.

3. Having regard to the objectives of the Community, sport is subject to Community law in so far as it constitutes an economic activity within the meaning of Article 2 of the Treaty, as in the case of the activities of professional or semi-professional footballers, where they are in gainful employment or provide a remunerated service.

4. It is not necessary, for the purposes of the application of the Community provisions on freedom of movement for workers, for the employer to be an undertaking; all that is required is the existence of, or the intention to create, an employment relationship.

5. Rules governing business relationships between employers in a sector of activity fall within the scope of the Community provisions relating to freedom of movement for workers if their application affects the terms of employment of workers.

That is true of rules relating to the transfer of players between football clubs which, although they govern the business relationships between clubs rather than the employment relationships between clubs and players, affect, because the employing clubs must pay fees on recruiting a player from another club, players'opportunities for finding employment and the terms under which such employment is offered.

6. The Community provisions concerning freedom of movement for persons and freedom to provide services do not preclude rules or practices in sport which are justified on non-economic grounds which relate to the particular nature and context of certain competitions. Such a restriction on the scope of the provisions in question must remain limited to its proper objective and cannot, therefore, be relied upon to exclude the whole of a sporting activity from the scope of the Treaty.

7. Freedom of movement for workers, guaranteed by Article 48 of the Treaty, is a fundamental freedom in the Community system and its scope cannot be limited by the Community's obligation to respect the national and regional cultural diversity of the Member States when it uses the powers of limited extent conferred upon it by Article 128(1) of the EC Treaty in the field of culture.

8. The principle of freedom of association, enshrined in Article 11 of the European Convention for the Protection of Human Rights and Fundamental Freedoms and resulting from the constitutional traditions common to the Member States, is one of the fundamental rights which, as the Court has consistently held and as is reaffirmed in the preamble to the Single European Act and in Article F(2) of the Treaty on European Union, are protected in the Community legal order.

However, rules likely to restrict freedom of movement for professional sportsmen, laid down by sporting associations, cannot be seen as necessary to ensure enjoyment of that freedom by those associations, by the clubs or by their players, nor can they be seen as an inevitable result thereof.

9. The principle of subsidiarity, even when interpreted broadly to the effect that intervention by Community authorities in the area of organization of sporting activities must be confined to what is strictly necessary, cannot lead to a situation in which the freedom of private associations to adopt sporting rules restricts the exercise of rights conferred on individuals by the Treaty.

10. Article 48 of the Treaty not only applies to the action of public authorities but extends also to rules of any other nature aimed at regulating gainful employment in a collective manner.

The abolition as between Member States of obstacles to freedom of movement for persons would be compromised if the abolition of State barriers could be neutralized by obstacles resulting from the exercise of their legal autonomy by associations or organizations not governed by public law. Furthermore, if the scope of Article 48 were confined to acts of a public authority there would be

a risk of creating inequality in its application, inasmuch as working conditions in the different Member States are governed sometimes by provisions laid down by law or regulation and sometimes by agreements and other acts concluded or adopted by private persons.

11. There is nothing to preclude individuals from relying, to justify restrictions on freedom of movement for workers which they may be alleged to have set up, on the grounds of public policy, public security or public health permitted by Article 48 of the Treaty. Neither the scope nor the content of those grounds of justification is in any way affected by the public or private nature of the restrictive rules in support of which they are adduced.

12. Article 48 of the Treaty applies to rules laid down by sporting associations which determine the terms on which professional sportsmen can engage in gainful employment.

13. The situation of a professional footballer who is a national of a Member State and, by entering into a contract of employment with a club in another Member State with a view to exercising gainful employment in that State, has accepted an offer of employment actually made within the meaning of Article 48(3)(a) of the Treaty, cannot be classified as purely internal and therefore not covered by Community law.

14. Article 48 of the Treaty precludes the application of rules laid down by sporting associations, under which a professional footballer who is a national of one Member State may not, on the expiry of his contract with a club, be employed by a club of another Member State unless the latter club has paid to the former club a transfer, training or development fee.

Such rules, even though they do not differ from those governing transfers within the same Member State, are likely to restrict the freedom of movement of players who wish to pursue their activity in another Member State by preventing or deterring them from leaving the clubs to which they belong even after the expiry of their contracts of employment with those clubs.

Nor are they an adequate means of achieving such legitimate aims as maintaining a financial and competitive balance between clubs and supporting the search for talent and the training of young players, since

° those rules neither preclude the richest clubs from securing the services of the best players nor prevent the availability of financial resources from being a decisive factor in competitive sport, thus considerably altering the balance between clubs,

° the fees provided for in those rules are by nature contingent and uncertain and are in any event unrelated to the actual cost of training borne by clubs and

° the same aims can be achieved at least as efficiently by other means which do not impede freedom of movement for workers.

15. Article 48 of the Treaty precludes the application of rules laid down by sporting associations under which, in matches in competitions which they organize, football clubs may field only a limited number of professional players who are nationals of other Member States.

Such rules are contrary to the principle of the prohibition of discrimination based on nationality as regards employment, remuneration and conditions of work and employment and it is of no relevance that they concern not the employment of such players, on which there is no restriction, but the extent to which their clubs may field them in official matches, since, in so far as participation in such matches is the essential purpose of a professional player's activity, a rule which restricts that participation obviously also restricts the chances of employment of the player concerned.

Nor can those rules, which do not concern specific matches between teams representing their countries but apply to all official matches between clubs, be justified for reasons which are not of an economic nature and are of sporting interest only, such as: preserving the traditional link between each club and its country, since a football club's links with the Member State in which it is established cannot be regarded as inherent in its sporting activity; creating a sufficient pool of national players to provide the national teams with top players to field in all team positions, since, whilst national teams must be made up of players having the nationality of the relevant country, those players need not necessarily be registered to play for clubs in that country; or maintaining a competitive balance between clubs, since there are no rules limiting the possibility for richer clubs to recruit the best national players, thus undermining that balance to just the same extent.

16. Except where such powers are expressly conferred upon it, the Commission may not give guarantees concerning the compatibility of specific practices with the Treaty and in no circumstances does it have the power to authorize practices which are contrary to the Treaty.

17. The interpretation which the Court, in the exercise of the jurisdiction conferred upon it by Article 177 of the Treaty, gives to a rule of Community law clarifies and where necessary defines the meaning and scope of that rule as it must be, or ought to have been, understood and applied from the time of its coming into force. It follows that the rule as thus interpreted can, and must, be applied by the courts even to legal relationships arising and established before the judgment ruling on the request for interpretation, provided that in other respects the conditions for bringing before the courts having jurisdiction an action relating to the application of that rule are satisfied.

It is only exceptionally that the Court may, in application of the general principle of legal certainty inherent in the Community legal order, be moved to restrict the opportunity for any person concerned to rely upon the provision as thus interpreted with a view to calling in question legal relationships established in good faith. Such a restriction may be allowed only by the Court, in the actual judgment ruling upon the interpretation sought.

Since the specific features of the rules laid down by the sporting associations for transfers of players between clubs of different Member States, together with the fact that the same or similar rules applied to transfers both between clubs belonging to the same national association and between clubs belonging to different national associations within the same Member State, may have caused uncertainty as to whether those rules were compatible with Community law, overriding considerations of legal certainty militate against calling in question legal situations whose effects have already been exhausted.

It must therefore be held that the direct effect of Article 48 of the Treaty cannot be relied upon in support of claims relating to a fee in respect of transfer, training or development which has already been paid on, or is still payable under an obligation which arose before, the date of this judgment, except by those who have brought court proceedings or raised an equivalent claim under the applicable national law before that date.

Parties

In Case C-415/93,

REFERENCE to the Court under Article 177 of the EEC Treaty by the Cour d'Appel, Liège, Belgium, for a preliminary ruling in the proceedings pending before that court between

Union Royale Belge des Sociétés de Football Association ASBL

and

Jean-Marc Bosman,

between

Royal Club Liégois SA

and

Jean-Marc Bosman,

SA d'Économie Mixte Sportive de l'Union Sportive du Littoral de Dunkerque,

Union Royale Belge des Sociétés de Football Association ASBL,

Union des Associations Européennes de Football (UEFA),

and between

Union des Associations Européennes de Football (UEFA)

and

Jean-Marc Bosman,

on the interpretation of Articles 48, 85 and 86 of the EEC Treaty,

THE COURT,

composed of: G.C. Rodríguez Iglesias, President, C.N. Kakouris, D.A.O. Edward and G. Hirsch (Presidents of Chambers), G.F. Mancini (Rapporteur), J.C. Moitinho de Almeida, P.J.G. Kapteyn, C. Gulmann, J.L. Murray, P. Jann and H. Ragnemalm, Judges,

Advocate General: C.O. Lenz,

Registrars: R. Grass, Registrar, and D. Louterman-Hubeau, Principal Administrator,

after considering the written observations submitted on behalf of:

° Union Royale Belge des Sociétés de Football Association ASBL, by G. Vandersanden and J.-P. Hordies, of the Brussels Bar, and by R. Rasir and F. Moïses, of the Liège Bar,

° Union des Associations Européennes de Football (UEFA), by I.S. Forrester QC,

° Mr Bosman, by L. Misson, J.-L. Dupont, M.-A. Lucas and M. Franchimont, of the Liège Bar,

° the French Government, by H. Duchène, Foreign Affairs Secretary in the Legal Directorate of the Ministry of Foreign Affairs, and C. de Salins, Assistant Director in the same directorate,

° the Italian Government, by Professor L. Ferrari Bravo, Head of the Legal Service in the Ministry of Foreign Affairs, assisted by D. Del Gaizo, Avvocato dello Stato,

° the Commission of the European Communities, by F.E. González Díaz, of its Legal Service, G. de Bergues, a national official placed at the disposal of its Legal Service, and Th. Margellos, of the Athens Bar,

having regard to the Report for the Hearing,

after hearing the oral observations of Union Royale Belge des Sociétés de Football Association ASBL, represented by F. Moïses, J.-P. Hordies and G. Vandersanden; of Union des Associations Européennes de Football ° UEFA, represented by I.S. Forrester and E. Jakhian, of the Brussels Bar; of Mr Bosman, represented by L. Misson and J.-L. Dupont; of the Danish Government, represented by P. Biering, Kontorchef in the Ministry of Foreign Affairs, acting as Agent; of the German Government, represented by E. Roeder, Ministerialrat in the Federal Ministry of the Economy; of the French Government, represented by C. de Salins and P. Martinet, Foreign Affairs Secretary in the Legal Directorate of the Ministry of Foreign Affairs, acting as Agents; of the Italian Government, represented by D. Del Gaizo; and of the Commission, represented by F.E. González Díaz, G. de Bergues and M. Wolfcarius, of its Legal Service, at the hearing on 20 June 1995,

after hearing the Opinion of the Advocate General at the sitting on 20 September 1995,

gives the following

Judgment

Grounds

1 By judgment of 1 October 1993, received at the Court on 6 October 1993, the Cour d'Appel (Appeal Court), Liège, referred to the Court for a preliminary ruling under Article 177 of the EEC Treaty a set of questions on the interpretation of Articles 48, 85 and 86 of that Treaty.

2 Those questions were raised in various proceedings between (i) Union Royale Belge des Sociétés de Football Association ASBL ("URBSFA") and Mr Bosman, (ii) Royal Club Liégois SA ("RC Liège") and Mr Bosman, SA d'Économie Mixte Sportive de l'Union Sportive du Littoral de Dunkerque ("US Dunkerque"), URBSFA and Union des Associations Européennes de Football (UEFA) ("UEFA") and, (iii) UEFA and Mr Bosman.

The rules governing the organization of football

3 Association football, commonly known as "football", professional or amateur, is practised as an organized sport in clubs which belong to national associations or federations in each of the Member States. Only in the United Kingdom are there more than one (in fact, four) national associations, for England, Wales, Scotland and Northern Ireland respectively. URBSFA is the Belgian national association. Also dependent on the national associations are other secondary or subsidiary associations responsible for organizing football in certain sectors or regions. The associations hold national championships, organized in divisions depending on the sporting status of the participating clubs.

4 The national associations are members of the Fédération Internationale de Football Association ("FIFA"), an association governed by Swiss law, which organizes football at world level. FIFA is divided into confederations for each continent, whose regulations require its approval. The confederation for Europe is UEFA, also an association governed by Swiss law. Its members are the national associations of some 50 countries, including in particular those of the Member States which, under the UEFA Statutes, have undertaken to comply with those Statutes and with the regulations and decisions of UEFA.

5 Each football match organized under the auspices of a national association must be played between two clubs which are members of that association or of secondary or subsidiary associations affiliated to it. The team fielded by each club consists of players who are registered by the national association to play for that club. Every professional player must be registered as such with his national association and is entered as the present or former employee of a specific club.

Transfer rules

6 The 1983 URBSFA federal rules, applicable at the time of the events giving rise to the different actions in the main proceedings, distinguish between three types of relationship: affiliation of a player to the federation, affiliation to a club, and registration of entitlement to play for a club, which is necessary for a player to be able to participate in official competitions. A transfer is defined as the transaction by which a player affiliated to an association obtains a change of club affiliation. If the transfer is temporary, the player continues to be affiliated to his club but is registered as entitled to play for another club.

7 Under the same rules, all professional players'contracts, which have a term of between one and five years, run to 30 June. Before the expiry of the contract, and by 26 April at the latest, the club must offer the player a new contract, failing which he is considered to be an amateur for transfer purposes and thereby falls under a different section of the rules. The player is free to accept or refuse that offer.

8 If he refuses, he is placed on a list of players available, between 1 and 31 May, for "compulsory" transfer, without the agreement of the club of affiliation but subject to payment to that club by the new club of a compensation fee for "training", calculated by multiplying the player's gross annual income by a factor varying from 14 to 2 depending on the player's age.

9 1 June marks the opening of the period for "free" transfers, with the agreement of both clubs and the player, in particular as to the amount of the transfer fee which the new club must pay to the old club, subject to penalties which may include striking off the new club for debt.

10 If no transfer takes place, the player's club of affiliation must offer him a new contract for one season on the same terms as that offered prior to 26 April. If the player refuses, the club has a period until 1 August in which it may suspend him, failing which he is reclassified as an amateur. A player who persistently refuses to sign the contracts offered by his club may obtain a transfer as an amateur, without his club's agreement, after not playing for two seasons.

11 The UEFA and FIFA regulations are not directly applicable to players but are included in the rules of the national associations, which alone have the power to enforce them and to regulate relations between clubs and players.

12 UEFA, URBSFA and RC Liège stated before the national court that the provisions applicable at the material time to transfers between clubs in different Member States or clubs belonging to different national associations within the same Member State were contained in a document entitled Principles of Cooperation between Member Associations of UEFA and their Clubs , approved by the UEFA Executive Committee on 24 May 1990 and in force from 1 July 1990.

13 That document provides that at the expiry of the contract the player is free to enter into a new contract with the club of his choice. That club must immediately notify the old club which in turn is to notify the national association, which must issue an international clearance certificate. However, the former club is entitled to receive from the new club compensation for training and development, to be fixed, failing agreement, by a board of experts set up within UEFA using a scale of multiplying factors, from 12 to 1 depending on the player's age, to be applied to the player's gross income, up to a maximum of SFR 5 000 000.

14 The document stipulates that the business relationships between the two clubs in respect of the compensation fee for training and development are to exert no influence on the activity of the player, who is to be free to play for his new club. However, if the new club does not immediately pay the fee to the old club, the UEFA Control and Disciplinary Committee is to deal with the matter and notify its decision to the national association concerned, which may also impose penalties on the debtor club.

15 The national court considers that in the case with which the main proceedings are concerned URBSFA and RC Liège applied not the UEFA but the FIFA regulations.

16 At the material time, the FIFA regulations provided in particular that a professional player could not leave the national association to which he was affiliated so long as he was bound by his contract and by the rules of his club and his national association, no matter how harsh their terms

might be. An international transfer could not take place unless the former national association issued a transfer certificate acknowledging that all financial commitments, including any transfer fee, had been settled.

17 After the events which gave rise to the main proceedings, UEFA opened negotiations with the Commission of the European Communities. In April 1991, it undertook in particular to incorporate in every professional player's contract a clause permitting him, at the expiry of the contract, to enter into a new contract with the club of his choice and to play for that club immediately. Provisions to that effect were incorporated in the Principles of Cooperation between Member Associations of UEFA and their Clubs adopted in December 1991 and in force from 1 July 1992.

18 In April 1991, FIFA adopted new Regulations governing the Status and Transfer of Football Players. That document, as amended in December 1991 and December 1993, provides that a player may enter into a contract with a new club where the contract between him and his club has expired, has been rescinded or is to expire within six months.

19 Special rules are laid down for "non-amateur" players, defined as players who have received, in respect of participation in or an activity connected with football, remuneration in excess of the actual expenses incurred in the course of such participation, unless they have reacquired amateur status.

20 Where a non-amateur player, or a player who assumes non-amateur status within three years of his transfer, is transferred, his former club is entitled to a compensation fee for development or training, the amount of which is to be agreed upon between the two clubs. In the event of disagreement, the dispute is to be submitted to FIFA or the relevant confederation.

21 Those rules have been supplemented by UEFA regulations "governing the fixing of a transfer fee", adopted in June 1993 and in force since 1 August 1993, which replace the 1991 "Principles of Cooperation between Member Associations of UEFA and their Clubs". The new rules retain the principle that the business relationship between the two clubs are to exert no influence on the sporting activity of the player, who is to be free to play for the club with which he has signed the new contract. In the event of disagreement between the clubs concerned, it is for the appropriate UEFA board of experts to determine the amount of the compensation fee for training or development. For non-amateur players, the calculation of the fee is based on the player's gross income in the last 12 months or on the fixed annual income guaranteed in the new contract, increased by 20% for players who have played at least twice in the senior national representative team for their country and multiplied by a factor of between 12 and 0 depending on age.

22 It appears from documents produced to the Court by UEFA that rules in force in other Member States also contain provisions requiring the new club, when a player is transferred between two clubs within the same national association, to pay the former club, on terms laid down in the rules in question, a compensation fee for transfer, training or development.

23 In Spain and France, payment of compensation may only be required if the player transferred is under 25 years of age or if his former club is the one with which he signed his first professional contract, as the case may be. In Greece, although no compensation is explicitly payable by the new club, the contract between the club and the player may make the player's departure dependent on the payment of an amount which, according to UEFA, is in fact most commonly paid by the new club.

24 The rules applicable in that regard may derive from the national legislation, from the regulations of the national football associations or from the terms of collective agreements.

Nationality clauses

25 From the 1960s onwards, many national football associations introduced rules ("nationality clauses") restricting the extent to which foreign players could be recruited or fielded in a match. For the purposes of those clauses, nationality is defined in relation to whether the player can be qualified to play in a country's national or representative team.

26 In 1978, UEFA gave an undertaking to Mr Davignon, a Member of the Commission of the European Communities, that it would remove the limitations on the number of contracts entered into by each club with players from other Member States and would set the number of such players who may participate in any one match at two, that limit not being applicable to players established for over five years in the Member State in question.

27 In 1991, following further discussions with Mr Bangemann, a Vice-President of the Commission, UEFA adopted the "3 + 2" rule permitting each national association to limit to three the number of foreign players whom a club may field in any first division match in their national

championships, plus two players who have played in the country of the relevant national association for an uninterrupted period of five years, including three years as a junior. The same limitation also applies to UEFA matches in competitions for club teams.

Facts of the cases before the national court

28 Mr Bosman, a professional footballer of Belgian nationality, was employed from 1988 by RC Liège, a Belgian first division club, under a contract expiring on 30 June 1990, which assured him an average monthly salary of BFR 120 000, including bonuses.

29 On 21 April 1990, RC Liège offered Mr Bosman a new contract for one season, reducing his pay to BFR 30 000, the minimum permitted by the URBSFA federal rules. Mr Bosman refused to sign and was put on the transfer list. The compensation fee for training was set, in accordance with the said rules, at BFR 11 743 000.

30 Since no club showed an interest in a compulsory transfer, Mr Bosman made contact with US Dunkerque, a club in the French second division, which led to his being engaged for a monthly salary in the region of BFR 100 000 plus a signing-on bonus of some BFR 900 000.

31 On 27 July 1990, a contract was also concluded between RC Liège and US Dunkerque for the temporary transfer of Mr Bosman for one year, against payment by US Dunkerque to RC Liège of a compensation fee of BFR 1 200 000 payable on receipt by the Fédération Française de Football ("FFF") of the transfer certificate issued by URBSFA. The contract also gave US Dunkerque an irrevocable option for full transfer of the player for BFR 4 800 000.

32 Both contracts, between US Dunkerque and RC Liège and between US Dunkerque and Mr Bosman, were however subject to the suspensive condition that the transfer certificate must be sent by URBSFA to FFF in time for the first match of the season, which was to be held on 2 August 1990.

33 RC Liège, which had doubts as to US Dunkerque's solvency, did not ask URBSFA to send the said certificate to FFF. As a result, neither contract took effect. On 31 July 1990, RC Liège also suspended Mr Bosman, thereby preventing him from playing for the entire season.

34 On 8 August 1990, Mr Bosman brought an action against RC Liège before the Tribunal de Première Instance (Court of First Instance), Liège. Concurrently with that action, he applied for an interlocutory decision ordering RC Liège and URBSFA to pay him an advance of BFR 100 000 per month until he found a new employer, restraining the defendants from impeding his engagement, in particular by requiring payment of a sum of money, and referring a question to the Court of Justice for a preliminary ruling.

35 By order of 9 November 1990, the judge hearing the interlocutory application ordered RC Liège and URBSFA to pay Mr Bosman an advance of BFR 30 000 per month and to refrain from impeding Mr Bosman's engagement. He also referred to the Court for a preliminary ruling a question (in Case C-340/90) on the interpretation of Article 48 in relation to the rules governing transfers of professional players ("transfer rules").

36 In the meantime, Mr Bosman had been signed up by the French second-division club Saint-Quentin in October 1990, on condition that his interlocutory application succeeded. His contract was terminated, however, at the end of the first season. In February 1992, Mr Bosman signed a new contract with the French club Saint-Denis de la Réunion, which was also terminated. After looking for further offers in Belgium and France, Mr Bosman was finally signed up by Olympic de Charleroi, a Belgian third-division club.

37 According to the national court, there is strong circumstantial evidence to support the view that, notwithstanding the "free" status conferred on him by the interlocutory order, Mr Bosman has been boycotted by all the European clubs which might have engaged him.

38 On 28 May 1991, the Cour d'Appel, Liège, revoked the interlocutory decision of the Tribunal de Première Instance in so far as it referred a question to the Court of Justice for a preliminary ruling. But it upheld the order against RC Liège to pay monthly advances to Mr Bosman and enjoined RC Liège and URBSFA to make Mr Bosman available to any club which wished to use his services, without it being possible to require payment of any compensation fee. By order of 19 June 1991, Case C-340/90 was removed from the register of the Court of Justice.

39 On 3 June 1991, URBSFA, which, contrary to the situation in the interlocutory proceedings, had not been cited as a party in the main action before the Tribunal de Première Instance, intervened voluntarily in that action. On 20 August 1991, Mr Bosman issued a writ with a view to joining UEFA to the proceedings which he had brought against RC Liège and URBSFA and bringing proceedings directly against it on the basis of its responsibility in drafting the rules as a result of

which he had suffered damage. On 5 December 1991, US Dunkerque was joined as a third party by RC Liège, in order to be indemnified against any order which might be made against it. On 15 October and 27 December 1991 respectively, Union Nationale des Footballeurs Professionnels ("UNFP"), a French professional footballers'union, and Vereniging van Contractspelers ("VVCS"), an association governed by Netherlands law, intervened voluntarily in the proceedings.

40 In new pleadings lodged on 9 April 1992, Mr Bosman amended his initial claim against RC Liège, brought a new preventive action against URBSFA and elaborated his claim against UEFA. In those proceedings, he sought a declaration that the transfer rules and nationality clauses were not applicable to him and an order, on the basis of their wrongful conduct at the time of the failure of his transfer to US Dunkerque, against RC Liège, URBSFA and UEFA to pay him BFR 11 368 350 in respect of the damage suffered by him from 1 August 1990 until the end of his career and BFR 11 743 000 in respect of loss of earnings since the beginning of his career as a result of the application of the transfer rules. He also applied for a question to be referred to the Court of Justice for a preliminary ruling.

41 By judgment of 11 June 1992, the Tribunal de Première Instance held that it had jurisdiction to entertain the main actions. It also held admissible Mr Bosman's claims against RC Liège, URBSFA and UEFA seeking, in particular, a declaration that the transfer rules and nationality clauses were not applicable to him and orders penalizing the conduct of those three organizations. But it dismissed RC Liège's application to join US Dunkerque as a third party and indemnifier, since no evidence of fault in the latter's performance of its obligations had been adduced. Finally, finding that the examination of Mr Bosman's claims against UEFA and URBSFA involved considering the compatibility of the transfer rules with the Treaty, it made a reference to the Court of Justice for a preliminary ruling on the interpretation of Articles 48, 85 and 86 of the Treaty (Case C-269/92).

42 URBSFA, RC Liège and UEFA appealed against that decision. Since those appeals had suspensive effect, the procedure before the Court of Justice was suspended. By order of 8 December 1993, Case C-269/92 was finally removed from the register following the new judgment of the Cour d'Appel, Liège, out of which the present proceedings arise.

43 No appeal was brought against UNFP or VVCS, who did not seek to intervene again on appeal.

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44 In its judgment ordering the reference, the Cour d'Appel upheld the judgment under appeal in so far as it held that the Tribunal de Première Instance had jurisdiction, that the actions were admissible and that an assessment of Mr Bosman's claims against UEFA and the URBSFA involved a review of the lawfulness of the transfer rules. It also considered that a review of the lawfulness of the nationality clauses was necessary, since Mr Bosman's claim in their regard was based on Article 18 of the Belgian Judicial Code, which permits actions "with a view to preventing the infringement of a seriously threatened right", and Mr Bosman had adduced factual evidence suggesting that the damage which he fears ° that the application of those clauses may impede his career ° will in fact occur.

45 The national court considered in particular that Article 48 of the Treaty could, like Article 30, prohibit not only discrimination but also non-discriminatory barriers to freedom of movement for workers if they could not be justified by imperative requirements.

46 With regard to Article 85 of the Treaty, it considered that the FIFA, UEFA and URBSFA regulations might constitute decisions of associations of undertakings by which the clubs restrict competition between themselves for players. Transfer fees were dissuasive and tended to depress the level of professional sportsmen's pay. In addition, the nationality clauses prohibited foreign players'services from being obtained over a certain quota. Finally, trade between Member States was affected, in particular by the restriction of players'mobility.

47 Furthermore, the Cour d'Appel thought that URBSFA, or the football clubs collectively, might be in a dominant position, within the meaning of Article 86 of the Treaty and that the restrictions on competition mentioned in connection with Article 85 might constitute abuses prohibited by Article 86.

48 The Cour d'Appel dismissed UEFA's request that it ask the Court of Justice whether the reply to the question submitted on transfers would be different if the system permitted a player to play freely for his new club even where that club had not paid the transfer fee to the old club. It noted in particular that, because of the threat of severe penalties for clubs not paying the transfer fee, a player's ability to play for his new club remained dependent on the business relationships between the clubs.

49 In view of the foregoing, the Cour d'Appel decided to stay the proceedings and refer the following questions to the Court of Justice for a preliminary ruling:

"Are Articles 48, 85 and 86 of the Treaty of Rome of 25 March 1957 to be interpreted as:

(i) prohibiting a football club from requiring and receiving payment of a sum of money upon the engagement of one of its players who has come to the end of his contract by a new employing club;

(ii) prohibiting the national and international sporting associations or federations from including in their respective regulations provisions restricting access of foreign players from the European Community to the competitions which they organize?"

50 On 3 June 1994, URBSFA applied to the Belgian Cour de Cassation (Court of Cassation) for review of the Cour d'Appel's judgment, requesting that the judgment be extended to apply jointly to RC Liège, UEFA and US Dunkerque. By letter of 6 October 1994, the Procureur Général (Principal Crown Counsel) to the Cour de Cassation informed the Court of Justice that the appeal did not have suspensive effect in this case.

51 By judgment of 30 March 1995, the Cour de Cassation dismissed the appeal and held that as a result the request for a declaration that the judgment be extended was otiose. The Cour de Cassation has forwarded a copy of that judgment to the Court of Justice.

The request for measures of inquiry

52 By letter lodged at the Court Registry on 16 November 1995, UEFA requested the Court to order a measure of inquiry under Article 60 of the Rules of Procedure, with a view to obtaining fuller information on the role played by transfer fees in the financing of small or medium-sized football clubs, the machinery governing the distribution of income within the existing football structures and the presence or absence of alternative machinery if the system of transfer fees were to disappear.

53 After hearing again the views of the Advocate General, the Court considers that that application must be dismissed. It was made at a time when, in accordance with Article 59(2) of the Rules of Procedure, the oral procedure was closed. The Court has held (see Case 77/70 Prelle v Commission [1971] ECR 561, paragraph 7) that such an application can be admitted only if it relates to facts which may have a decisive influence and which the party concerned could not put forward before the close of the oral procedure.

54 In this case, it is sufficient to hold that UEFA could have submitted its request before the close of the oral procedure. Moreover, the question whether the aim of maintaining a balance in financial and competitive terms, and in particular that of ensuring the financing of smaller clubs, can be achieved by other means such as a redistribution of a portion of football takings was raised, in particular by Mr Bosman in his written observations.

Jurisdiction of the Court to give a preliminary ruling on the questions submitted

55 The Court's jurisdiction to give a ruling on all or part of the questions submitted by the national court has been challenged, on various grounds, by URBSFA, by UEFA, by some of the governments which have submitted observations and, during the written procedure, by the Commission.

56 First, UEFA and URBSFA have claimed that the main actions are procedural devices designed to obtain a preliminary ruling from the Court on questions which meet no objective need for the purpose of settling the cases. The UEFA regulations were not applied when Mr Bosman's transfer to US Dunkerque fell through; if they had been applied, that transfer would not have been dependent on the payment of a transfer fee and could thus have taken place. The interpretation of Community law requested by the national court thus bears no relation to the actual facts of the cases in the main proceedings or their purpose and, in accordance with consistent case-law, the Court has no jurisdiction to rule on the questions submitted.

57 Secondly, URBSFA, UEFA, the Danish, French and Italian Governments and, in its written observations, the Commission have claimed that the questions relating to nationality clauses has no connection with the disputes, which concern only the application of the transfer rules. The impediments to his career which Mr Bosman claims arise out of those clauses are purely hypothetical and do not justify a preliminary ruling by the Court on the interpretation of the Treaty in that regard.

58 Thirdly, URBSFA and UEFA pointed out at the hearing that, according to the judgment of the Cour de Cassation of 30 March 1995, the Cour d'Appel did not accept as admissible Mr Bosman's

claims for a declaration that the nationality clauses in the URBSFA regulations were not applicable to him. Consequently, the issues in the main proceedings do not relate to the application of nationality clauses and the Court should not rule on the questions submitted on that point. The French Government concurred in that conclusion, subject however to verification of the scope of the judgment of the Cour de Cassation.

59 As to those submissions, it is to be remembered that, in the context of the cooperation between the Court of Justice and the national courts provided for by Article 177 of the Treaty, it is solely for the national court before which the dispute has been brought, and which must assume responsibility for the subsequent judicial decision, to determine in the light of the particular circumstances of the case both the need for a preliminary ruling in order to enable it to deliver judgment and the relevance of the questions which it submits to the Court. Consequently, where the questions submitted by the national court concern the interpretation of Community law, the Court of Justice is, in principle, bound to give a ruling (see, inter alia, Case C-125/94 Aprile v Amministrazione delle Finanze dello Stato [1995] ECR I-0000, paragraphs 16 and 17).

60 Nevertheless, the Court has taken the view that, in order to determine whether it has jurisdiction, it should examine the conditions in which the case was referred to it by the national court. The spirit of cooperation which must prevail in the preliminary-ruling procedure requires the national court, for its part, to have regard to the function entrusted to the Court of Justice, which is to assist in the administration of justice in the Member States and not to deliver advisory opinions on general or hypothetical questions (see, inter alia, Case C-83/91 Meilicke v ADV/ORGA [1992] ECR I-4871, paragraph 25).

61 That is why the Court has held that it has no jurisdiction to give a preliminary ruling on a question submitted by a national court where it is quite obvious that the interpretation of Community law sought by that court bears no relation to the actual facts of the main action or its purpose (see, inter alia, Case C-143/94 Furlanis v ANAS [1995] ECR I-0000, paragraph 12) or where the problem is hypothetical and the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it (see, inter alia, Meilicke, cited above, paragraph 32).

62 In the present case, the issues in the main proceedings, taken as a whole, are not hypothetical and the national court has provided this Court with a clear statement of the surrounding facts, the rules in question and the grounds on which it believes that a decision on the questions submitted is necessary to enable it to give judgment.

63 Furthermore, even if, as URBSFA and UEFA contend, the UEFA regulations were not applied when Mr Bosman's transfer to US Dunkerque fell through, they are still in issue in the preventive actions brought by Mr Bosman against URBSFA and UEFA (see paragraph 40 above) and the Court's interpretation as to the compatibility with Community law of the transfer system set up by the UEFA regulations may be useful to the national court.

64 With regard more particularly to the questions concerning nationality clauses, it appears that the relevant heads of claim have been held admissible in the main proceedings on the basis of a national procedural provision permitting an action to be brought, albeit for declaratory purposes only, to prevent the infringement of a right which is seriously threatened. As is clear from its judgment, the national court considered that application of the nationality clauses could indeed impede Mr Bosman's career by reducing his chances of being employed or fielded in a match by a club from another Member State. It concluded that Mr Bosman's claims for a declaration that those nationality clauses were not applicable to him met the conditions laid down by the said provision.

65 It is not for this Court, in the context of these proceedings, to call that assessment in question. Although the main actions seek a declaratory remedy and, having the aim of preventing infringement of a right under threat, must necessarily be based on hypotheses which are, by their nature, uncertain, such actions are none the less permitted under national law, as interpreted by the referring court. Consequently, the questions submitted by that court meet an objective need for the purpose of settling disputes properly brought before it.

66 Finally, the judgment of the Cour de Cassation of 30 March 1995 does not suggest that the nationality clauses are extraneous to the issues in the main proceedings. That court held only that URBSFA's appeal against the judgment of the Cour d'Appel rested on a misinterpretation of that judgment. In its appeal, URBSFA had claimed that that court had held inadmissible a claim by Mr Bosman for a declaration that the nationality clauses contained in its regulations were not applicable to him. However, it would appear from the judgment of the Cour de Cassation that,

according to the Cour d'Appel, Mr Bosman's claim sought to prevent impediments to his career likely to arise from the application not of the nationality clauses in the URBSFA regulations, which concerned players with a nationality other than Belgian, but of the similar clauses in the regulations of UEFA and the other national associations which are members of it, which could concern him as a player with Belgian nationality. Consequently, it does not appear from the judgment of the Cour de Cassation that those latter nationality clauses are extraneous to the main proceedings.

67 It follows from the foregoing that the Court has jurisdiction to rule on the questions submitted by the Cour d'Appel, Liège.

Interpretation of Article 48 of the Treaty with regard to the transfer rules

68 By its first question, the national court seeks in substance to ascertain whether Article 48 of the Treaty precludes the application of rules laid down by sporting associations, under which a professional footballer who is a national of one Member State may not, on the expiry of his contract with a club, be employed by a club of another Member State unless the latter club has paid to the former a transfer, training or development fee.

Application of Article 48 to rules laid down by sporting associations

69 It is first necessary to consider certain arguments which have been put forward on the question of the application of Article 48 to rules laid down by sporting associations.

70 URBSFA argued that only the major European clubs may be regarded as undertakings, whereas clubs such as RC Liège carry on an economic activity only to a negligible extent. Furthermore, the question submitted by the national court on the transfer rules does not concern the employment relationships between players and clubs but the business relationships between clubs and the consequences of freedom to affiliate to a sporting federation. Article 48 of the Treaty is accordingly not applicable to a case such as that in issue in the main proceedings.

71 UEFA argued, inter alia, that the Community authorities have always respected the autonomy of sport, that it is extremely difficult to distinguish between the economic and the sporting aspects of football and that a decision of the Court concerning the situation of professional players might call in question the organization of football as a whole. For that reason, even if Article 48 of the Treaty were to apply to professional players, a degree of flexibility would be essential because of the particular nature of the sport.

72 The German Government stressed, first, that in most cases a sport such as football is not an economic activity. It further submitted that sport in general has points of similarity with culture and pointed out that, under Article 128(1) of the EC Treaty, the Community must respect the national and regional diversity of the cultures of the Member States. Finally, referring to the freedom of association and autonomy enjoyed by sporting federations under national law, it concluded that, by virtue of the principle of subsidiarity, taken as a general principle, intervention by public, and particularly Community, authorities in this area must be confined to what is strictly necessary.

73 In response to those arguments, it is to be remembered that, having regard to the objectives of the Community, sport is subject to Community law only in so far as it constitutes an economic activity within the meaning of Article 2 of the Treaty (see Case 36/74 Walrave v Union Cycliste Internationale [1974] ECR 1405, paragraph 4). This applies to the activities of professional or semi-professional footballers, where they are in gainful employment or provide a remunerated service (see Case 13/76 Donà v Mantero [1976] ECR 1333, paragraph 12).

74 It is not necessary, for the purposes of the application of the Community provisions on freedom of movement for workers, for the employer to be an undertaking; all that is required is the existence of, or the intention to create, an employment relationship.

75 Application of Article 48 of the Treaty is not precluded by the fact that the transfer rules govern the business relationships between clubs rather than the employment relationships between clubs and players. The fact that the employing clubs must pay fees on recruiting a player from another club affects the players'opportunities for finding employment and the terms under which such employment is offered.

76 As regards the difficulty of severing the economic aspects from the sporting aspects of football, the Court has held (in Donà, cited above, paragraphs 14 and 15) that the provisions of Community law concerning freedom of movement of persons and of provision of services do not preclude rules or practices justified on non-economic grounds which relate to the particular nature and context of certain matches. It stressed, however, that such a restriction on the scope

of the provisions in question must remain limited to its proper objective. It cannot, therefore, be relied upon to exclude the whole of a sporting activity from the scope of the Treaty.

77 With regard to the possible consequences of this judgment on the organization of football as a whole, it has consistently been held that, although the practical consequences of any judicial decision must be weighed carefully, this cannot go so far as to diminish the objective character of the law and compromise its application on the ground of the possible repercussions of a judicial decision. At the very most, such repercussions might be taken into consideration when determining whether exceptionally to limit the temporal effect of a judgment (see, inter alia, Case C-163/90 Administration des Douanes v Legros and Others [1992] ECR I-4625, paragraph 30).

78 The argument based on points of alleged similarity between sport and culture cannot be accepted, since the question submitted by the national court does not relate to the conditions under which Community powers of limited extent, such as those based on Article 128(1), may be exercised but on the scope of the freedom of movement of workers guaranteed by Article 48, which is a fundamental freedom in the Community system (see, inter alia, Case C-19/92 Kraus v Land Baden-Wuerttemberg [1993] ECR I-1663, paragraph 16).

79 As regards the arguments based on the principle of freedom of association, it must be recognized that this principle, enshrined in Article 11 of the European Convention for the Protection of Human Rights and Fundamental Freedoms and resulting from the constitutional traditions common to the Member States, is one of the fundamental rights which, as the Court has consistently held and as is reaffirmed in the preamble to the Single European Act and in Article F(2) of the Treaty on European Union, are protected in the Community legal order.

80 However, the rules laid down by sporting associations to which the national court refers cannot be seen as necessary to ensure enjoyment of that freedom by those associations, by the clubs or by their players, nor can they be seen as an inevitable result thereof.

81 Finally, the principle of subsidiarity, as interpreted by the German Government to the effect that intervention by public authorities, and particularly Community authorities, in the area in question must be confined to what is strictly necessary, cannot lead to a situation in which the freedom of private associations to adopt sporting rules restricts the exercise of rights conferred on individuals by the Treaty.

82 Once the objections concerning the application of Article 48 of the Treaty to sporting activities such as those of professional footballers are out of the way, it is to be remembered that, as the Court held in paragraph 17 of its judgment in Walrave, cited above, Article 48 not only applies to the action of public authorities but extends also to rules of any other nature aimed at regulating gainful employment in a collective manner.

83 The Court has held that the abolition as between Member States of obstacles to freedom of movement for persons and to freedom to provide services would be compromised if the abolition of State barriers could be neutralized by obstacles resulting from the exercise of their legal autonomy by associations or organizations not governed by public law (see Walrave, cited above, paragraph 18).

84 It has further observed that working conditions in the different Member States are governed sometimes by provisions laid down by law or regulation and sometimes by agreements and other acts concluded or adopted by private persons. Accordingly, if the scope of Article 48 of the Treaty were confined to acts of a public authority there would be a risk of creating inequality in its application (see Walrave, cited above, paragraph 19). That risk is all the more obvious in a case such as that in the main proceedings in this case in that, as has been stressed in paragraph 24 above, the transfer rules have been laid down by different bodies or in different ways in each Member State.

85 UEFA objects that such an interpretation makes Article 48 of the Treaty more restrictive in relation to individuals than in relation to Member States, which are alone in being able to rely on limitations justified on grounds of public policy, public security or public health.

86 That argument is based on an false premiss. There is nothing to preclude individuals from relying on justifications on grounds of public policy, public security or public health. Neither the scope nor the content of those grounds of justification is in any way affected by the public or private nature of the rules in question.

87 Article 48 of the Treaty therefore applies to rules laid down by sporting associations such as URBSFA, FIFA or UEFA, which determine the terms on which professional sportsmen can engage in gainful employment.

Whether the situation envisaged by the national court is of a purely internal nature

88 UEFA considers that the disputes pending before the national court concern a purely internal Belgian situation which falls outside the ambit of Article 48 of the Treaty. They concern a Belgian player whose transfer fell through because of the conduct of a Belgian club and a Belgian association.

89 It is true that, according to consistent case-law (see, inter alia, Case 175/78 Regina v Saunders [1979] ECR 1129, paragraph 11; Case 180/83 Moser v Land Baden-Wuerttemberg [1984] ECR 2539, paragraph 15; Case C-332/90 Steen v Deutsche Bundespost [1992] ECR I-341, paragraph 9; and Case C-19/92 Kraus, cited above, paragraph 15), the provisions of the Treaty concerning the free movement of workers, and particularly Article 48, cannot be applied to situations which are wholly internal to a Member State, in other words where there is no factor connecting them to any of the situations envisaged by Community law.

90 However, it is clear from the findings of fact made by the national court that Mr Bosman had entered into a contract of employment with a club in another Member State with a view to exercising gainful employment in that State. By so doing, as he has rightly pointed out, he accepted an offer of employment actually made, within the meaning of Article 48(3)(a).

91 Since the situation in issue in the main proceedings cannot be classified as purely internal, the argument put forward by UEFA must be dismissed.

Existence of an obstacle to freedom of movement for workers

92 It is thus necessary to consider whether the transfer rules form an obstacle to freedom of movement for workers prohibited by Article 48 of the Treaty.

93 As the Court has repeatedly held, freedom of movement for workers is one of the fundamental principles of the Community and the Treaty provisions guaranteeing that freedom have had direct effect since the end of the transitional period.

94 The Court has also held that the provisions of the Treaty relating to freedom of movement for persons are intended to facilitate the pursuit by Community citizens of occupational activities of all kinds throughout the Community, and preclude measures which might place Community citizens at a disadvantage when they wish to pursue an economic activity in the territory of another Member State (see Case 143/87 Stanton v INASTI [1988] ECR 3877, paragraph 13, and Case C-370/90 The Queen v Immigration Appeal Tribunal and Surinder Singh [1992] ECR I-4265, paragraph 16).

95 In that context, nationals of Member States have in particular the right, which they derive directly from the Treaty, to leave their country of origin to enter the territory of another Member State and reside there in order there to pursue an economic activity (see, inter alia, Case C-363/89 Roux v Belgium [1991] ECR I-273, paragraph 9, and Singh, cited above, paragraph 17).

96 Provisions which preclude or deter a national of a Member State from leaving his country of origin in order to exercise his right to freedom of movement therefore constitute an obstacle to that freedom even if they apply without regard to the nationality of the workers concerned (see also Case C-10/90 Masgio v Bundesknappschaft [1991] ECR I-1119, paragraphs 18 and 19).

97 The Court has also stated, in Case 81/87 The Queen v H.M. Treasury and Commissioners of Inland Revenue ex parte Daily Mail and General Trust plc [1988] ECR 5483, paragraph 16, that even though the Treaty provisions relating to freedom of establishment are directed mainly to ensuring that foreign nationals and companies are treated in the host Member State in the same way as nationals of that State, they also prohibit the Member State of origin from hindering the establishment in another Member State of one of its nationals or of a company incorporated under its legislation which comes within the definition contained in Article 58. The rights guaranteed by Article 52 et seq. of the Treaty would be rendered meaningless if the Member State of origin could prohibit undertakings from leaving in order to establish themselves in another Member State. The same considerations apply, in relation to Article 48 of the Treaty, with regard to rules which impede the freedom of movement of nationals of one Member State wishing to engage in gainful employment in another Member State.

98 It is true that the transfer rules in issue in the main proceedings apply also to transfers of players between clubs belonging to different national associations within the same Member State and that similar rules govern transfers between clubs belonging to the same national association.

99 However, as has been pointed out by Mr Bosman, by the Danish Government and by the Advocate General in points 209 and 210 of his Opinion, those rules are likely to restrict the freedom of movement of players who wish to pursue their activity in another Member State by

preventing or deterring them from leaving the clubs to which they belong even after the expiry of their contracts of employment with those clubs.

100 Since they provide that a professional footballer may not pursue his activity with a new club established in another Member State unless it has paid his former club a transfer fee agreed upon between the two clubs or determined in accordance with the regulations of the sporting associations, the said rules constitute an obstacle to freedom of movement for workers.

101 As the national court has rightly pointed out, that finding is not affected by the fact that the transfer rules adopted by UEFA in 1990 stipulate that the business relationship between the two clubs is to exert no influence on the activity of the player, who is to be free to play for his new club. The new club must still pay the fee in issue, under pain of penalties which may include its being struck off for debt, which prevents it just as effectively from signing up a player from a club in another Member State without paying that fee.

102 Nor is that conclusion negated by the case-law of the Court cited by URBSFA and UEFA, to the effect that Article 30 of the Treaty does not apply to measures which restrict or prohibit certain selling arrangements so long as they apply to all relevant traders operating within the national territory and so long as they affect in the same manner, in law and in fact, the marketing of domestic products and of those from other Member States (see Joined Cases C-267/91 and C-268/91 Keck and Mithouard [1993] ECR I-6097, paragraph 16).

103 It is sufficient to note that, although the rules in issue in the main proceedings apply also to transfers between clubs belonging to different national associations within the same Member State and are similar to those governing transfers between clubs belonging to the same national association, they still directly affect players'access to the employment market in other Member States and are thus capable of impeding freedom of movement for workers. They cannot, thus, be deemed comparable to the rules on selling arrangements for goods which in Keck and Mithouard were held to fall outside the ambit of Article 30 of the Treaty (see also, with regard to freedom to provide services, Case C-384/93 Alpine Investments v Minister van Financiën [1995] ECR I-1141, paragraphs 36 to 38).

104 Consequently, the transfer rules constitute an obstacle to freedom of movement for workers prohibited in principle by Article 48 of the Treaty. It could only be otherwise if those rules pursued a legitimate aim compatible with the Treaty and were justified by pressing reasons of public interest. But even if that were so, application of those rules would still have to be such as to ensure achievement of the aim in question and not go beyond what is necessary for that purpose (see, inter alia, the judgment in Kraus, cited above, paragraph 32, and Case C-55/94 Gebhard [1995] ECR I-0000, paragraph 37).

Existence of justifications

105 First, URBSFA, UEFA and the French and Italian Governments have submitted that the transfer rules are justified by the need to maintain a financial and competitive balance between clubs and to support the search for talent and the training of young players.

106 In view of the considerable social importance of sporting activities and in particular football in the Community, the aims of maintaining a balance between clubs by preserving a certain degree of equality and uncertainty as to results and of encouraging the recruitment and training of young players must be accepted as legitimate.

107 As regards the first of those aims, Mr Bosman has rightly pointed out that the application of the transfer rules is not an adequate means of maintaining financial and competitive balance in the world of football. Those rules neither preclude the richest clubs from securing the services of the best players nor prevent the availability of financial resources from being a decisive factor in competitive sport, thus considerably altering the balance between clubs.

108 As regards the second aim, it must be accepted that the prospect of receiving transfer, development or training fees is indeed likely to encourage football clubs to seek new talent and train young players.

109 However, because it is impossible to predict the sporting future of young players with any certainty and because only a limited number of such players go on to play professionally, those fees are by nature contingent and uncertain and are in any event unrelated to the actual cost borne by clubs of training both future professional players and those who will never play professionally. The prospect of receiving such fees cannot, therefore, be either a decisive factor in encouraging recruitment and training of young players or an adequate means of financing such activities, particularly in the case of smaller clubs.

110 Furthermore, as the Advocate General has pointed out in point 226 et seq. of his Opinion, the same aims can be achieved at least as efficiently by other means which do not impede freedom of movement for workers.

111 It has also been argued that the transfer rules are necessary to safeguard the worldwide organization of football.

112 However, the present proceedings concern application of those rules within the Community and not the relations between the national associations of the Member States and those of non-member countries. In any event, application of different rules to transfers between clubs belonging to national associations within the Community and to transfers between such clubs and those affiliated to the national associations of non-member countries is unlikely to pose any particular difficulties. As is clear from paragraphs 22 and 23 above, the rules which have so far governed transfers within the national associations of certain Member States are different from those which apply at the international level.

113 Finally, the argument that the rules in question are necessary to compensate clubs for the expenses which they have had to incur in paying fees on recruiting their players cannot be accepted, since it seeks to justify the maintenance of obstacles to freedom of movement for workers simply on the ground that such obstacles were able to exist in the past.

114 The answer to the first question must therefore be that Article 48 of the Treaty precludes the application of rules laid down by sporting associations, under which a professional footballer who is a national of one Member State may not, on the expiry of his contract with a club, be employed by a club of another Member State unless the latter club has paid to the former club a transfer, training or development fee.

Interpretation of Article 48 of the Treaty with regard to the nationality clauses

115 By its second question, the national court seeks in substance to ascertain whether Article 48 of the Treaty precludes the application of rules laid down by sporting associations, under which, in matches in competitions which they organize, football clubs may field only a limited number of professional players who are nationals of other Member States.

Existence of an obstacle to freedom of movement for workers

116 As the Court has held in paragraph 87 above, Article 48 of the Treaty applies to rules laid down by sporting associations which determine the conditions under which professional sports players may engage in gainful employment. It must therefore be considered whether the nationality clauses constitute an obstacle to freedom of movement for workers, prohibited by Article 48.

117 Article 48(2) expressly provides that freedom of movement for workers entails the abolition of any discrimination based on nationality between workers of the Member States as regards employment, remuneration and conditions of work and employment.

118 That provision has been implemented, in particular, by Article 4 of Regulation (EEC) No 1612/68 of the Council of 15 October 1968 on freedom of movement for workers within the Community (OJ, English Special Edition, 1968(II), p. 475), under which provisions laid down by law, regulation or administrative action of the Member States which restrict by number or percentage the employment of foreign nationals in any undertaking, branch of activity or region, or at a national level, are not to apply to nationals of the other Member States.

119 The same principle applies to clauses contained in the regulations of sporting associations which restrict the right of nationals of other Member States to take part, as professional players, in football matches (see the judgment in Donà, cited above, paragraph 19).

120 The fact that those clauses concern not the employment of such players, on which there is no restriction, but the extent to which their clubs may field them in official matches is irrelevant. In so far as participation in such matches is the essential purpose of a professional player's activity, a rule which restricts that participation obviously also restricts the chances of employment of the player concerned.

Existence of justifications

121 The existence of an obstacle having thus been established, it must be considered whether that obstacle may be justified in the light of Article 48 of the Treaty.

122 URBSFA, UEFA and the German, French and Italian Governments argued that the nationality clauses are justified on non-economic grounds, concerning only the sport as such.

123 First, they argued, those clauses serve to maintain the traditional link between each club and

its country, a factor of great importance in enabling the public to identify with its favourite team and ensuring that clubs taking part in international competitions effectively represent their countries.

124 Secondly, those clauses are necessary to create a sufficient pool of national players to provide the national teams with top players to field in all team positions.

125 Thirdly, they help to maintain a competitive balance between clubs by preventing the richest clubs from appropriating the services of the best players.

126 Finally, UEFA points out that the "3 + 2" rule was drawn up in collaboration with the Commission and must be revised regularly to remain in line with the development of Community policy.

127 It must be recalled that in paragraphs 14 and 15 of its judgment in Donà, cited above, the Court held that the Treaty provisions concerning freedom of movement for persons do not prevent the adoption of rules or practices excluding foreign players from certain matches for reasons which are not of an economic nature, which relate to the particular nature and context of such matches and are thus of sporting interest only, such as, for example, matches between national teams from different countries. It stressed, however, that that restriction on the scope of the provisions in question must remain limited to its proper objective.

128 Here, the nationality clauses do not concern specific matches between teams representing their countries but apply to all official matches between clubs and thus to the essence of the activity of professional players.

129 In those circumstances, the nationality clauses cannot be deemed to be in accordance with Article 48 of the Treaty, otherwise that article would be deprived of its practical effect and the fundamental right of free access to employment which the Treaty confers individually on each worker in the Community rendered nugatory (on this last point, see Case 222/86 Unectef v Heylens and Others [1987] ECR 4097, paragraph 14).

130 None of the arguments put forward by the sporting associations and by the governments which have submitted observations detracts from that conclusion.

131 First, a football club's links with the Member State in which it is established cannot be regarded as any more inherent in its sporting activity than its links with its locality, town, region or, in the case of the United Kingdom, the territory covered by each of the four associations. Even though national championships are played between clubs from different regions, towns or localities, there is no rule restricting the right of clubs to field players from other regions, towns or localities in such matches.

132 In international competitions, moreover, participation is limited to clubs which have achieved certain results in competition in their respective countries, without any particular significance being attached to the nationalities of their players.

133 Secondly, whilst national teams must be made up of players having the nationality of the relevant country, those players need not necessarily be registered to play for clubs in that country. Indeed, under the rules of the sporting associations, foreign players must be allowed by their clubs to play for their country's national team in certain matches.

134 Furthermore, although freedom of movement for workers, by opening up the employment market in one Member State to nationals of the other Member States, has the effect of reducing workers'chances of finding employment within the Member State of which they are nationals, it also, by the same token, offers them new prospects of employment in other Member States. Such considerations obviously apply also to professional footballers.

135 Thirdly, although it has been argued that the nationality clauses prevent the richest clubs from engaging the best foreign players, those clauses are not sufficient to achieve the aim of maintaining a competitive balance, since there are no rules limiting the possibility for such clubs to recruit the best national players, thus undermining that balance to just the same extent.

136 Finally, as regards the argument based on the Commission's participation in the drafting of the "3 + 2" rule, it must be pointed out that, except where such powers are expressly conferred upon it, the Commission may not give guarantees concerning the compatibility of specific practices with the Treaty (see also Joined Cases 142/80 and 143/80 Amministrazione delle Finanze dello Stato v Essevi and Salengo [1981] ECR 1413, paragraph 16). In no circumstances does it have the power to authorize practices which are contrary to the Treaty.

137 It follows from the foregoing that Article 48 of the Treaty precludes the application of rules

laid down by sporting associations under which, in matches in competitions which they organize, football clubs may field only a limited number of professional players who are nationals of other Member States.

Interpretation of Articles 85 and 86 of the Treaty

138 Since both types of rule to which the national court's question refer are contrary to Article 48, it is not necessary to rule on the interpretation of Articles 85 and 86 of the Treaty.

The temporal effects of this judgment

139 In their written and oral observations, UEFA and URBSFA have drawn the Court's attention to the serious consequences which might ensue from its judgment for the organization of football as a whole if it were to consider the transfer rules and nationality clauses to be incompatible with the Treaty.

140 Mr Bosman, whilst observing that such a solution is not indispensable, has suggested that the Court could limit the temporal effects of its judgment in so far as it concerns the transfer rules.

141 It has consistently been held that the interpretation which the Court, in the exercise of the jurisdiction conferred upon it by Article 177 of the Treaty, gives to a rule of Community law clarifies and where necessary defines the meaning and scope of that rule as it must be, or ought to have been, understood and applied from the time of its coming into force. It follows that the rule as thus interpreted can, and must, be applied by the courts even to legal relationships arising and established before the judgment ruling on the request for interpretation, provided that in other respects the conditions for bringing before the courts having jurisdiction an action relating to the application of that rule are satisfied (see, inter alia, Case 24/86 Blaizot v University of Liège and Others [1988] ECR 379, paragraph 27).

142 It is only exceptionally that the Court may, in application of the general principle of legal certainty inherent in the Community legal order, be moved to restrict the opportunity for any person concerned to rely upon the provision as thus interpreted with a view to calling in question legal relationships established in good faith. Such a restriction may be allowed only by the Court, in the actual judgment ruling upon the interpretation sought (see, inter alia, the judgments in Blaizot, cited above, paragraph 28, and Legros, cited above, paragraph 30).

143 In the present case, the specific features of the rules laid down by the sporting associations for transfers of players between clubs of different Member States, together with the fact that the same or similar rules applied to transfers both between clubs belonging to the same national association and between clubs belonging to different national associations within the same Member State, may have caused uncertainty as to whether those rules were compatible with Community law.

144 In such circumstances, overriding considerations of legal certainty militate against calling in question legal situations whose effects have already been exhausted. An exception must, however, be made in favour of persons who may have taken timely steps to safeguard their rights. Finally, limitation of the effects of the said interpretation can be allowed only in respect of compensation fees for transfer, training or development which have already been paid on, or are still payable under an obligation which arose before, the date of this judgment.

145 It must therefore be held that the direct effect of Article 48 of the Treaty cannot be relied upon in support of claims relating to a fee in respect of transfer, training or development which has already been paid on, or is still payable under an obligation which arose before, the date of this judgment, except by those who have brought court proceedings or raised an equivalent claim under the applicable national law before that date.

146 With regard to nationality clauses, however, there are no grounds for a temporal limitation of the effects of this judgment. In the light of the Walrave and Donà judgments, it was not reasonable for those concerned to consider that the discrimination resulting from those clauses was compatible with Article 48 of the Treaty.

Decision on costs

Costs

147 The costs incurred by the Danish, French, German and Italian Governments and the Commission of the European Communities, which have submitted observations to the Court, are

not recoverable. Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court.

Operative part

On those grounds,

THE COURT,

in answer to the questions referred to it by the Cour d'Appel, Liège, by judgment of 1 October 1993, hereby rules:

1. Article 48 of the EEC Treaty precludes the application of rules laid down by sporting associations, under which a professional footballer who is a national of one Member State may not, on the expiry of his contract with a club, be employed by a club of another Member State unless the latter club has paid to the former club a transfer, training or development fee.

2. Article 48 of the EEC Treaty precludes the application of rules laid down by sporting associations under which, in matches in competitions which they organize, football clubs may field only a limited number of professional players who are nationals of other Member States.

3. The direct effect of Article 48 of the EEC Treaty cannot be relied upon in support of claims relating to a fee in respect of transfer, training or development which has already been paid on, or is still payable under an obligation which arose before, the date of this judgment, except by those who have brought court proceedings or raised an equivalent claim under the applicable national law before that date.

62000J0099

Judgment of the Court of 4 June 2002. - Criminal proceedings against Kenny Roland Lyckeskog. - Reference for a preliminary ruling: Hovrätten för Västra Sverige - Sweden. - Questions for a preliminary ruling - Obligation to refer - Court or tribunal against whose decisions there is no judicial remedy under national law - Interpretation of Regulation (EEC) No 918/83 - Community system of reliefs from customs duty. - Case C-99/00.

European Court reports 2002 Page I-04839

Keywords

1. Preliminary rulings - Reference to the Court - Obligation to refer - None - Conditions - Decisions of a national court or tribunal appealable to a supreme court subject to a condition of admissibility

(Art. 234 EC, third para.)

2. Common Customs Tariff - Duty-free allowances for goods contained in travellers' personal luggage - Non-commercial nature of goods imported - Assessment criteria

(Council Regulation No 918/83, Art. 45(2)(b), as amended by Regulation No 355/94)

3. Common Customs Tariff - Duty-free allowances for goods contained in travellers' personal luggage - Non-commercial nature of goods imported - National administrative instructions imposing binding quantitative limits on relief from customs duties - Not permissible

(Council Regulation No 918/83, Art. 45, as amended by Regulation No 355/94)

Summary

$$1. Where its decisions may be appealed to a supreme court, a national court or tribunal is not under the obligation referred to in the third paragraph of Article 234 EC to refer a question to the Court of Justice for a preliminary ruling even if examination of the merits by the supreme court is subject to a prior declaration of admissibility.

(see paras 16, 19, operative part 1)

2. The question whether an importation of goods is non-commercial, within the meaning of Article 45(2)(b) of Regulation No 918/83 setting up a Community system of reliefs from customs duty, as amended by Regulation No 355/94, must be examined case by case on the basis of an overall assessment of the circumstances, taking into account the nature of the importation and the quantity of goods involved, the frequency with which the same goods are imported by the traveller concerned, but also, where appropriate, taking into account that traveller's lifestyle and habits or his family environment.

(see para. 27, operative part 2)

3. Article 45 of Regulation No 918/83 setting up a Community system of reliefs from customs duty, as amended by Regulation No 355/94, precludes national administrative instructions or

practices which impose binding quantitative limits on relief from customs duties or which would have the effect of creating an irrebuttable presumption that the importation concerned is commercial by reason of the quantity of goods imported.

(see para. 33, operative part 3)

Parties

In Case C-99/00,

REFERENCE to the Court under Article 234 EC by the Hovrätt för Västra Sverige (Sweden) for a preliminary ruling in the criminal proceedings pending before that court against

Kenny Roland Lyckeskog,

on the interpretation of the third paragraph of Article 234 EC and of Article 45(1) of Council Regulation (EEC) No 918/83 of 28 March 1983 setting up a Community system of reliefs from customs duty (OJ 1983 L 105, p. 1), as amended by Council Regulation (EC) No 355/94 of 14 February 1994 (OJ 1994 L 46, p. 5),

THE COURT,

composed of: G.C. Rodríguez Iglesias, President, P. Jann, F. Macken, N. Colneric, and S. von Bahr (Presidents of Chambers), C. Gulmann, D.A.O. Edward, A. La Pergola, J.-P. Puissochet (Rapporteur), M. Wathelet, V. Skouris, J.N. Cunha Rodrigues and A. Rosas, Judges,

Advocate General: A. Tizzano,

Registrar: R. Grass,

after considering the written observations submitted on behalf of:

- the Swedish Government, by L. Nordling, acting as Agent,

- the Danish Government, by J. Molde, acting as Agent,

- the Finnish Government, by E. Bygglin, acting as Agent,

- the United Kingdom Government, by J.E. Collins, acting as Agent, and M. Hoskins, Barrister,

- the Commission of the European Communities, by L. Ström, acting as Agent,

having regard to the report of the Judge-Rapporteur,

after hearing the Opinion of the Advocate General at the sitting on 21 February 2002,

gives the following

Judgment

Grounds

1 By decision of 10 March 2000, received at the Court on 16 March 2000, the Hovrätt för Västra Sverige (Court of Appeal for Western Sweden) referred to the Court for a preliminary ruling under Article 234 EC four questions on the interpretation of the third paragraph of Article 234 EC and of Article 45(1) of Council Regulation (EEC) No 918/83 of 28 March 1983 setting up a Community system of reliefs from customs duty (OJ 1983 L 105, p. 1), as amended by Council Regulation (EC) No 355/94 of 14 February 1994 (OJ 1994 L 46, p. 5) (Regulation No 918/83).

2 Those questions have arisen in proceedings brought against Mr Lyckeskog on the ground that he had attempted to smuggle into Sweden 500 kg of rice from Norway without declaring that importation.

Community law

3 With regard to the obligations devolving on the court or tribunal making a reference, the third paragraph of Article 234 EC provides:

Where any such question is raised in a case pending before a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law, that court or tribunal shall bring the matter before the Court of Justice.

4 The provisions of Community law applicable to the dispute in the main proceedings are Articles 45 and 47 of Regulation No 918/83, which provide:

Article 45

1. Subject to Articles 46 to 49, goods contained in the personal luggage of travellers coming from a third country shall be admitted free of import duties, provided such imports are of a non-commercial nature.

2. For the purposes of paragraph 1:

...

(b) "imports of a non-commercial nature" means imports which:

- are of an occasional nature, and

- consist exclusively of goods for the personal use of the travellers or their families, or of goods intended as presents; the nature and quantity of such goods should not be such as might indicate that they are being imported for commercial reasons.

...

Article 47

The relief referred to in Article 45 shall be granted up to a total value of ECU 175 per traveller to goods other than those listed in Article 46.

However, Member States may reduce this amount to ECU 90 for travellers under 15 years of age.

National legislation

5 The Swedish hovrätter deliver judgments which may be the subject of appeal to the Högsta domstol (Supreme Court) (Sweden). Such an appeal will always be examined if it is brought by the Public Prosecutor in cases involving the exercise of public authority. In other cases, an appeal will be examined as to its substance only if the Högsta domstol has declared it admissible.

6 Paragraph 10 of Chapter 54 of the Rättegångsbalk (Code of Procedure) provides that the Högsta domstol may declare an appeal admissible only if:

1. it is important for guidance in the application of the law that the appeal be examined by the Högsta domstol, or

2. there are special grounds for examination of the appeal, such as the existence of grounds of review on a point of law, formal defect, or where the outcome of the case before the hovrätt is manifestly attributable to negligence or serious error.

The dispute in the main proceedings and the questions submitted for preliminary ruling

7 Mr Lyckeskog was found guilty of attempted smuggling by the Strömstads tingsrätt (District Court, Strömstad) on the ground that he had attempted, in 1998, to import 500 kg of rice from Norway into Sweden. The tingsrätt, basing itself on the fact that Mr Lyckeskog had exceeded the quantity of 20 kg authorised by decision of the customs administration for the duty-free importation of rice, held that the importation by Mr Lyckeskog was of a commercial nature within the meaning of Regulation No 918/83.

8 Mr Lyckeskog appealed against that decision to the Hovrätt för Västra Sverige, which, although taking the view that it could rule on the merits of the case given that there was no difficulty in interpreting the applicable provisions of Community law, expressed uncertainty as to whether it was to be regarded as a court ruling at last instance and for that reason obliged under the third paragraph of Article 234 EC to refer a question for a preliminary ruling to the Court to enable it to interpret the relevant provisions of Regulation No 918/83, as the conditions laid down in the judgment in Case 283/81 CILFIT [1982] ECR 3415 did not appear to be satisfied.

9 It was in those circumstances that the Hovrätt för Västra Sverige referred the following questions to the Court for a preliminary ruling:

1. Is a national court or tribunal which in practice is the last instance in a case, because a declaration of admissibility is needed in order for the case to be reviewed by the country's supreme court, a court or tribunal within the meaning of the third paragraph of Article 234 EC?

2. May a court or tribunal within the meaning of the third paragraph of Article 234 EC decline to request a preliminary ruling where it considers it clear how the questions of Community law in point must be decided, even if those questions are not covered by the doctrine of acte clair or acte éclairé?

In the event that the Court of Justice answers the first question in the negative, or the first

question in the affirmative and the second question in the negative - but not otherwise - the Hovrätt also wishes to have an answer to the following questions:

3. Under Article 45(1) of Council Regulation (EEC) No 918/83 of 28 March 1983 setting up a Community system of reliefs from customs duty, goods contained in the personal luggage of travellers coming from a third country are, subject to Articles 46 to 49 of that regulation, to be admitted free of import duties, provided that such imports are of a non-commercial nature. Does this mean that the nature and quantity of the goods should, on an objective view, not be such as to raise doubts about the nature of the import? Or may regard be had to the individual's lifestyle and habits?

4. What is the legal significance of a national authority's provisions which indicate the duty-free quantity of a certain product - to which Council Regulation (EEC) No 918/83 of 28 March 1983 setting up a Community system of reliefs from customs duty is applicable - normally to be admitted?

The first question

10 The essence of the first question referred by the Hovrätt för Västra Sverige is whether a national court or tribunal whose decisions will be examined by the national supreme court, before which they are challenged, only if that supreme court declares the appeal to be admissible is to be regarded as a court or tribunal against whose decisions there is no judicial remedy under national law within the meaning of the third paragraph of Article 234 EC.

11 The Danish Government submits that any court or tribunal whose decisions may be the subject of appeal only after a declaration of admissibility has been issued must be considered to be a court or tribunal of the type referred to in the third paragraph of Article 234 EC. It bases its reasoning on, first, the judgment in Case 6/64 Costa [1964] ECR 585, in which the Court pointed out that, under the actual wording of that provision, national courts against whose decisions, as in the main proceedings in that case, there was no judicial remedy, had to refer the matter to the Court so that a preliminary ruling could be given on the interpretation of Community law, and, second, the judgment in Case 107/76 Hoffmann-La Roche [1977] ECR 957, in which the Court ruled that the underlying purpose of Article 234 EC is to ensure that Community law is interpreted and applied in a uniform manner in all the Member States, the particular objective of the third paragraph being to prevent a body of national case-law not in accordance with the rules of Community law from coming into existence in any Member State. The requirement of a declaration of admissibility would thus constitute an obstacle to the uniform interpretation of Community law if the supreme court alone were covered by the obligation arising under the third paragraph of Article 234 EC.

12 The judgment in Costa, cited above, is also cited by the Swedish and Finnish Governments in their observations submitted to the Court, but in support of an analysis contrary to that of the Danish Government. Thus, they contend that the mere fact that the decisions of the hovrätter may be subject to appeal suffices to justify the conclusion that those courts are not covered by the third paragraph of Article 234 EC. The mechanism of a declaration of admissibility, they argue, does no more than limit the prospects of an applicant having his appeal examined. It does not, as the United Kingdom Government points out, remove the possibility of lodging an appeal against judgments of the hovrätter. The United Kingdom further submits that, at the stage of considering the admissibility of an appeal, a supreme court can make a reference for a preliminary ruling on a question as to the interpretation of a rule of Community law. The referring court, questioned on this point by the Court, accepts that this is so as regards the Högsta domstol. The Swedish Government points out, moreover, that, in the exceptional cases in which there is no ordinary avenue of appeal against judgments of the hovrätter and those courts therefore, from the formal point of view, rule at final instance, they come within the scope of the third paragraph of Article 234 EC.

13 The Commission takes the same position, basing its reasoning on the fact that, where a court ruling on admissibility at last instance considers that an issue of Community law has not been correctly dealt with, that court is required to refer a question to the Court for a preliminary ruling pursuant to the third paragraph of Article 234 EC, or rely on one of the limits on the obligation to refer defined in the judgment in CILFIT, cited above, or remit the case to a lower court. Thus, the possibility of referring a question for a preliminary ruling will always be preserved and the risk of interference with the uniform interpretation of Community law consequently avoided.

14 The obligation on national courts against whose decisions there is no judicial remedy to refer a question to the Court for a preliminary ruling has its basis in the cooperation established, in order

to ensure the proper application and uniform interpretation of Community law in all the Member States, between national courts, as courts responsible for applying Community law, and the Court. That obligation is in particular designed to prevent a body of national case-law that is not in accordance with the rules of Community law from coming into existence in any Member State (see, inter alia, Hoffmann-La Roche, cited above, paragraph 5, and Case C-337/95 Parfums Christian Dior [1997] ECR I-6013, paragraph 25).

15 That objective is secured when, subject to the limits accepted by the Court of Justice (CILFIT), supreme courts are bound by this obligation to refer (Parfums Christian Dior, cited above) as is any other national court or tribunal against whose decisions there is no judicial remedy under national law (Joined Cases 28/62, 29/62 and 30/62 Da Costa en Schaake [1963] ECR 31).

16 Decisions of a national appellate court which can be challenged by the parties before a supreme court are not decisions of a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law within the meaning of Article 234 EC. The fact that examination of the merits of such appeals is subject to a prior declaration of admissibility by the supreme court does not have the effect of depriving the parties of a judicial remedy.

17 That is so under the Swedish system. The parties always have the right to appeal to the Högsta domstol against the judgment of a hovrätt, which cannot therefore be classified as a court delivering a decision against which there is no judicial remedy. Under Paragraph 10 of Chapter 54 of the Rättegångsbalk, the Högsta domstol may issue a declaration of admissibility if it is important for guidance as to the application of the law that the appeal be examined by that court. Thus, uncertainty as to the interpretation of the law applicable, including Community law, may give rise to review, at last instance, by the supreme court.

18 If a question arises as to the interpretation or validity of a rule of Community law, the supreme court will be under an obligation, pursuant to the third paragraph of Article 234 EC, to refer a question to the Court of Justice for a preliminary ruling either at the stage of the examination of admissibility or at a later stage.

19 The answer to the first question must therefore be that, where the decisions of a national court or tribunal can be appealed to the supreme court under conditions such as those that apply to decisions of the referring court in the present case, that court or tribunal is not under the obligation referred to in the third paragraph of Article 234 EC.

The second question

20 The essence of the second question referred by the Hovrätt för Västra Sverige is whether, in the event that a hovrätt is to be regarded as a court or tribunal within the meaning of the third paragraph of Article 234 EC, it is obliged to refer the matter to the Court even though interpretation of the rule of Community law applicable to the dispute in the main proceedings does not present any difficulty but the conditions required by the judgment in CILFIT for application of the acte clair doctrine are not met.

21 In view of the answer to the first question and to the fact that, under Swedish legislation, the Högsta domstol may, on appeal to it against a decision by a hovrätt, refer a question to the Court for a preliminary ruling, it is unnecessary to reply to the second question.

The third question

22 The Hovrätt för Västra Sverige is asking the Court, essentially, to specify the criteria for determining whether the importation of goods contained in the personal luggage of a person travelling from a non-member country is entirely non-commercial within the meaning of Article 45(1) of Regulation No 918/83, and in particular whether that assessment must take into account the lifestyle and habits of the individual concerned.

23 According to the Finnish Government, when, by reason of their nature or the fact that they are of significant quantity, goods seized from the personal luggage of a traveller appear to have been imported for commercial purposes, the lifestyle and habits of the person concerned must be examined. If, at the conclusion of such an examination, it does not appear that the goods are intended solely for personal or family use, the customs authorities are entitled to take the view that the importation is commercial in nature and for that reason to refuse duty-free status. The Commission agrees with that approach, which requires a case-by-case consideration of whether it is appropriate to grant duty-free status.

24 The Swedish Government also maintains that, in order to determine whether the importation of goods seized from a traveller's personal luggage is commercial in nature, account must be taken of the nature and quantity of the goods, but adds that the economic and personal

circumstances of the traveller, whose wife, in the main proceedings in the present case, comes from Asia, must also be taken into account. The Swedish Government bases itself on the position taken by the Court in Case C-208/88 Commission v Denmark [1990] ECR I-4445, according to which Article 45 of Regulation No 918/83 does not allow Member States to presume, without allowing proof to the contrary, that an importation must be commercial in nature where the imported goods found in the personal luggage of a traveller exceed a certain quantity.

25 According to the relevant provisions of Regulation No 918/83, imports of a non-commercial nature are imports which consist exclusively of goods for the personal use of travellers or their families, or of goods intended as presents, where the nature or quantity of the goods is not such as to indicate that they are being imported for commercial reasons.

26 Personal use, by definition, varies from one person to another, and from one culture to another, and the designation, for reference purposes, of a typical use would for that reason be unsatisfactory. It is therefore essential, for the proper application of Regulation No 918/83, that a case-by-case assessment be made as to whether importation is commercial in character, account being taken, where appropriate, of the lifestyle and habits of each traveller. While the nature and quantity of the goods under consideration are among the indicators to be taken into account, customs authorities cannot confine themselves to those indicators in assessing whether or not the importation is commercial.

27 The answer to the third question must therefore be that the question whether an importation of goods is non-commercial, within the meaning of Article 45(2)(b) of Regulation No 918/83, must be examined case by case on the basis of an overall assessment of the circumstances, taking into account the nature of the importation and the quantity of goods involved, the frequency with which those goods are imported by the traveller concerned, but also, where appropriate, taking account of that traveller's lifestyle and habits or of his family environment.

The fourth question

28 By its fourth question, the Hovrätt för Västra Sverige is asking, essentially, whether Regulation No 918/83 is compatible with national administrative provisions fixing the quantity of goods to which that regulation applies and which may be imported free from customs duty.

29 The Finnish Government points out the purpose of Regulation No 918/83, which is to establish, throughout Community territory, a uniform system of relief from customs duties.

30 Like the Swedish Government and the Commission, the Finnish Government contends that that regulation does not entitle Member States to impose more stringent quantitative restrictions for certain products unless such restrictions are justified on moral or public-policy grounds. Nor does it enable Member States to decide whether importation is or is not commercial solely by reference to the quantity of goods imported. National provisions of that kind are incompatible with Regulation No 918/83.

31 On the other hand, the parties which have submitted observations contend that Community law does not preclude non-binding instructions drawn up by the customs authorities indicating, for a particular product, the maximum quantity below which a traveller is not required to provide other evidence that the importation is non-commercial.

32 Such an analysis of Regulation No 918/83 is in accordance with the reply given to the third question. If Member States were entitled to impose quantitative restrictions on grounds other than morality or public policy, the uniform nature of the system of relief from customs duties throughout Community territory would be jeopardised. However, instructions drawn up by the customs authorities, as long as they are not an indirect way of introducing an irrebuttable presumption that imports are commercial, but are simply a non-binding criterion designed to facilitate customs procedures, are not incompatible with the system established by Regulation No 918/83.

33 The answer to the fourth question must therefore be that Article 45 of Regulation No 918/83 precludes national administrative instructions or practices which impose binding quantitative limits on relief from customs duties or which would have the effect of creating an irrebuttable presumption that the importation concerned is commercial by reason of the quantity of goods imported.

Decision on costs

Costs

34 The costs incurred by the Swedish, Danish, Finnish and United Kingdom Governments and by the Commission, which have submitted observations to the Court, are not recoverable. Since these proceedings are, for the parties to the main proceedings, a step in the proceedings pending before the national court, the decision on costs is a matter for that court.

Operative part

On those grounds,

THE COURT,

in answer to the questions referred to it by the Hovrätt för Västra Sverige by decision of 10 March 2000, hereby rules:

1. Where the decisions of a national court or tribunal can be appealed to the supreme court under conditions such as those that apply to decisions of the referring court in the present case, that court or tribunal is not under the obligation referred to in the third paragraph of Article 234 EC.

2. The question whether an importation of goods is non-commercial, within the meaning of Article 45(2)(b) of Council Regulation (EEC) No 918/83 of 28 March 1983 setting up a Community system of reliefs from customs duty, as amended by Council Regulation (EC) No 355/94 of 14 February 1994, must be examined case by case on the basis of an overall assessment of the circumstances, taking into account the nature of the importation and the quantity of goods involved, the frequency with which those goods are imported by the traveller concerned, but also, where appropriate, taking account of that traveller's lifestyle and habits or of his family environment.

3. Article 45 of Regulation No 918/83, as amended by Regulation No 355/94, precludes national administrative instructions or practices which impose binding quantitative limits on relief from customs duties or which would have the effect of creating an irrebuttable presumption that the importation concerned is commercial by reason of the quantity of goods imported.

Joined Cases C-397/01 to C-403/01

Bernhard Pfeiffer and Others

v

Deutsches Rotes Kreuz, Kreisverband Waldshut eV

(Reference for a preliminary ruling from the Arbeitsgericht Lörrach)

(Social policy – Protection of the health and safety of workers – Directive 93/104/EC – Scope – Emergency workers in attendance in ambulances in the framework of an emergency service run by the German Red Cross – Definition of 'road transport' – Maximum weekly working time – Principle – Direct effect – Derogation – Conditions)

Summary of the Judgment

1. *Social policy – Protection of the health and safety of workers – Directive 89/391 on the introduction of measures to encourage improvements in the safety and health of workers at work – Directive 93/104 concerning certain aspects of the organisation of working time – Scope – Activity of emergency workers – Included – Activity not forming part of civil protection services or road transport excluded from such scope*

   (Council Directives 89/391, Art. 2, and 93/104, Art. 1(3))

2. *Social policy – Protection of the health and safety of workers – Directive 93/104 concerning certain aspects of the organisation of working time – Maximum weekly working time – Derogation – Worker's consent – Employment contract referring to a collective agreement permitting the extension of that time – Insufficient*

   (Council Directive 93/104, Art. 18(1)(b)(i))

3. *Social policy – Protection of the health and safety of workers – Directive 93/104 concerning certain aspects of the organisation of working time – Activity of emergency workers – National legislation permitting the extension of the maximum weekly working time by means of a collective or works agreement – Not permissible*

   (Council Directive 93/104, Art. 6(2))

4. *Social policy – Protection of the health and safety of workers – Directive 93/104 concerning certain aspects of the organisation of working time – Article 6(2) – Direct effect – Powers and duties of the national court – Non-application of national provisions permitting the extension of the maximum weekly working time set by that article*

   (Council Directive 93/104, Art. 6(2))

1. Article 2 of Directive 89/391 on the introduction of measures to encourage improvements in the safety and health of workers at work and Article 1(3) of Directive 93/104 concerning certain aspects of the organisation of working time must be construed as meaning that the activity of emergency workers, carried out in the framework of an emergency medical service, falls within the scope of those directives.

   In that regard, that activity does not come within the exclusion in the first subparagraph of Article 2(2) of Directive 89/391 relating to certain specific activities within the public service. That exclusion was adopted purely for the purpose of ensuring the proper operation of services essential for the protection of public health, safety and order in

cases the gravity and scale of which are exceptional and a characteristic of which is the fact that, by their nature, they do not lend themselves to planning as regards the working time of teams of emergency workers.

Likewise, the activity of emergency workers, even if it includes, at least in part, using a vehicle and accompanying a patient on his journey to hospital, cannot be regarded as 'road transport' and therefore must be excluded from the scope of Article 1(3) of Directive 93/104.

(see paras 55, 63, 72, 74, operative part 1)

2. The first indent of Article 18(1)(b)(i) of Directive 93/104 concerning certain aspects of the organisation of working time, which confers the right not to apply Article 6 of that directive containing the rule as to the maximum weekly working time, is to be construed as requiring consent to be expressly and freely given by each worker individually if the 48-hour maximum period of weekly working time, as laid down in Article 6 of that directive, is to be validly extended. In that connection, it is not sufficient that the relevant worker's employment contract refers to a collective agreement which permits such an extension, since it is by no means certain that, when he entered into such a contract, the worker concerned knew of the restriction of the rights conferred on him by Directive 93/104.

(see paras 85-86, operative part 2)

3. Article 6(2) of Directive 93/104 concerning certain aspects of the organisation of working time must be interpreted as precluding legislation in a Member State the effect of which, as regards periods of duty time completed by emergency workers in the framework of an emergency medical service, is to permit, including by means of a collective agreement or works agreement based on such an agreement, the 48-hour maximum period of weekly working time laid down by that provision to be exceeded.

First, it follows both from the wording of Article 6(2) of Directive 93/104 and from the purpose and scheme of that directive, that the 48-hour upper limit on weekly working time constitutes a rule of Community social law of particular importance from which every worker must benefit, since it is a minimum requirement necessary to ensure protection of his safety and health, so that national legislation which authorises weekly working time in excess of 48 hours, including periods of duty time, is not compatible with the requirements of Article 6(2) of the directive. Second, periods of duty time completed by emergency workers must be taken into account in their totality in the calculation of maximum daily and weekly working time, regardless of the fact that they necessarily include periods of inactivity of varying length between calls.

(see paras 94-95, 100-101, 120, operative part 3)

4. Article 6(2) of Directive 93/104 concerning certain aspects of the organisation of working time fulfils all the conditions necessary for it to have direct effect, since it imposes on Member States in unequivocal terms a precise obligation as to the result to be achieved, which is not coupled with any condition regarding application of the rule laid down by it, which provides for a 48-hour maximum as regards average weekly working time. The fact that the directive leaves the Member States a degree of latitude to adopt rules in order to implement Article 6, and that it permits them to derogate from it, do not alter the precise and unconditional nature of Article 6(2).

Accordingly, when hearing a case between individuals, a national court, which is required, when applying the provisions of domestic law adopted for the purpose of transposing obligations laid down by a directive, to consider the whole body of rules of national law and to interpret them, so far as possible, in the light of the wording and purpose of the directive in order to achieve an outcome consistent with the objective pursued by it, must do whatever lies within its jurisdiction to ensure that the maximum

period of weekly working time, which is set at 48 hours by the said Article 6(2), is not exceeded.

(see paras 104-106, 119-120, operative part 3)

JUDGMENT OF THE COURT (Grand Chamber)
5 October 2004(1)

(Social policy – Protection of the health and safety of workers – Directive 93/104/EC – Scope – Emergency workers in attendance in ambulances in the framework of an emergency service run by the German Red Cross – Definition of 'road transport' – Maximum weekly working time – Principle – Direct effect – Derogation – Conditions)

In Joined Cases C-397/01 to C-403/01,REFERENCES for a preliminary ruling under Article 234 EC,from the Arbeitsgericht Lörrach (Germany), made by orders of 26 September 2001, received at the Court on 12 October 2001, in the proceedings

Bernhard Pfeiffer (C-397/01),**Wilhelm Roith** (C-398/01),**Albert Süß** (C-399/01),**Michael Winter** (C-400/01),**Klaus Nestvogel** (C-401/01),**Roswitha Zeller** (C-402/01),**Matthias Döbele** (C-403/01)

v

Deutsches Rotes Kreuz, Kreisverband Waldshut eV,

THE COURT (Grand Chamber),,

composed of: V. Skouris, President, P. Jann, C.W.A. Timmermans, C. Gulmann, J.-P. Puissochet and J.N. Cunha Rodrigues, Presidents of Chambers, R. Schintgen (Rapporteur), F. Macken, N. Colneric, S. von Bahr and K. Lenaerts, Judges,

Advocate General: D. Ruiz-Jarabo Colomer,
Registrar: H. von Holstein, Deputy Registrar,

having regard to the written procedure,after considering the observations submitted on behalf of:

–
Mr Pfeiffer, Mr Roith, Mr Süß, Mr Winter, Mr Nestvogel, Ms Zeller and Mr Döbele, by B. Spengler, Rechtsanwalt,

–
the Commission of the European Communities, by J. Sack and H. Kreppel, acting as Agents,

after considering the observations submitted on behalf of:

–
Mr Pfeiffer, Mr Roith, Mr Nestvogel, Ms Zeller and Mr Döbele, by B. Spengler,

–
Mr Süß and Mr Winter, by K. Lörcher, Gewerkschaftssekretär,

–
the German Government, by W.-D. Plessing, acting as Agent,

–
the French Government, by R. Abraham, G. de Bergues and C. Bergeot-Nunes, acting as Agents,

–
the Italian Government, by I.M. Braguglia, acting as Agent, and A. Cingolo, avvocato del Stato,

–
the United Kingdom Government, by C. Jackson, acting as Agent, and A. Dashwood, Barrister,

–
the Commission, by J. Sack and H. Kreppel,

after hearing the Opinion of the Advocate General at the sitting on 6 May 2003,

after hearing the Opinion of the Advocate General at the sitting on 27 April 2004,

gives the following

Judgment

1
These references for a preliminary ruling concern the interpretation of Article 2 of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (OJ 1989 L 183, p. 1) and of Articles 1(3), 6 and 18(1)(b)(i) of Council Directive 93/104/EC of 23 November 1993 concerning certain aspects of the organisation of working time (OJ 1993 L 307, p. 18).

2
The references were made to the Court in various sets of proceedings between (i) Mr Pfeiffer, Mr Roith, Mr Süß, Mr Winter, Mr Nestvogel, Ms Zeller and Mr Döbele, who work or used to work as emergency workers, and (ii) Deutsches Rotes Kreuz, Kreisverband Waldshut eV (German Red Cross, Waldshut section ('Deutsches Rotes Kreuz')), a body which employs or employed the claimants in the main actions. The proceedings concern German legislation providing for weekly working time in excess of 48 hours.

Legal framework

Community legislation

3
Directives 89/391 and 93/104 were adopted on the basis of Article 118a of the EC Treaty (Articles 117 to 120 of the EC Treaty have been replaced by Articles 136 EC to 143 EC).

4
Directive 89/391 is the framework directive which lays down general principles concerning the health and safety of workers. Those principles were subsequently developed by a series of specific directives, including Directive 93/104.

5
Article 2 of Directive 89/391 defines the scope of the directive as follows:

‘1. This Directive shall apply to all sectors of activity, both public and private (industrial, agricultural, commercial, administrative, service, educational, cultural, leisure, etc.).

2. This Directive shall not be applicable where characteristics peculiar to certain specific public service activities, such as the armed forces or the police, or to certain specific activities in the civil protection services inevitably conflict with it.

In that event, the safety and health of workers must be ensured as far as possible in the light of the objectives of this Directive.’

6
Article 1 of Directive 93/104, entitled ‘Purpose and scope’, provides as follows:

‘1. This Directive lays down minimum safety and health requirements for the organisation of working time.

2. This Directive applies to:

(a) minimum periods of daily rest, weekly rest and annual leave, to breaks and maximum weekly working time; and

(b) certain aspects of night work, shift work and patterns of work.

3. This Directive shall apply to all sectors of activity, both public and private, within the meaning of Article 2 of Directive 89/391/EEC, without prejudice to Article 17 of this Directive, with the exception of air, rail, road, sea, inland waterway and lake transport, sea fishing, other work at sea and the activities of doctors in training;

4. The provisions of Directive 89/391/EEC are fully applicable to the matters referred to in paragraph 2, without prejudice to more stringent and/or specific provisions contained in this Directive.’

7
Under the heading ‘Definitions’, Article 2 of Directive 93/104 provides:

‘For the purposes of this Directive, the following definitions shall apply:

1. “working time” shall mean any period during which the worker is working, at the employer’s disposal and carrying out his activity or duties, in accordance with national laws and/or practice;

2. “rest period” shall mean any period which is not working time;

…’

8
Section II of the directive lays down the measures which the Member States must take to ensure that all workers are afforded, inter alia, daily minimum rest periods and weekly rest periods and it also regulates maximum weekly working time.

9
So far as maximum weekly working time is concerned, Article 6 of Directive 93/104 provides:

‘Member States shall take the measures necessary to ensure that, in keeping with the need to protect the safety and health of workers:

…

2. the average working time for each 7-day period, including overtime, does not exceed 48 hours.’

10
Article 15 of Directive 93/104 provides:

‘This Directive shall not affect Member States’ right to apply or introduce laws, regulations or administrative provisions more favourable to the protection of the safety and health of workers or to facilitate or permit the application of collective agreements or agreements concluded between the two sides of industry which are more favourable to the protection of the safety and health of workers.’

11
Article 16 of the directive provides:

‘Member States may lay down:

…

2. for the application of Article 6 (maximum weekly working time), a reference period not exceeding four months.

…’

12
Directive 93/104 sets out a set of exceptions to a number of its basic rules, in view of the specific features of certain activities and subject to compliance with certain conditions. In that connection, Article 17 provides:

‘1. With due regard for the general principles of the protection of the safety and health of workers, Member States may derogate from Article 3, 4, 5, 6, 8 or 16 when, on account of the specific characteristics of the activity concerned, the duration of the working time is not measured and/or predetermined or can be determined by the workers themselves, and particularly in the case of:

(a)
managing executives or other persons with autonomous decision-taking powers;

(b)
family workers; or

(c)
workers officiating at religious ceremonies in churches and religious communities.

2. Derogations may be adopted by means of laws, regulations or administrative provisions or by means of collective agreements or agreements between the two sides of industry provided that the workers concerned are afforded equivalent periods of compensatory rest or that, in exceptional cases in which it is not possible, for objective reasons, to grant such equivalent periods of compensatory rest, the workers concerned are afforded appropriate protection:

2.1 from Articles 3, 4, 5, 8 and 16:

…

(c)
in the case of activities involving the need for continuity of service or production, particularly;

(i) services relating to the reception, treatment and/or care provided by hospitals or similar establishments, residential institutions and prisons;

…

(iii) press, radio, television, cinematographic production, postal and telecommunications services, ambulance, fire and civil protection services;

…

3. Derogations may be made from Articles 3, 4, 5, 8 and 16 by means of collective agreements or agreements concluded between the two sides of industry at national or regional level or, in conformity with the rules laid down by them, by means of collective agreements or agreements concluded between the two sides of industry at a lower level.

…

The derogations provided for in the first and second subparagraphs shall be allowed on condition that equivalent compensating rest periods are granted to the workers concerned or, in exceptional cases where it is not possible for objective reasons to grant such periods, the workers concerned are afforded appropriate protection.

…

4. The option to derogate from point 2 of Article 16, provided in paragraph 2, points 2.1 and 2.2 and in paragraph 3 of this Article, may not result in the establishment of a reference period exceeding six months.

However, Member States shall have the option, subject to compliance with the general principles relating to the protection of the safety and health of workers, of allowing, for objective or technical reasons or reasons concerning the organisation of work, collective agreements or agreements concluded between the two sides of industry to set reference periods in no event exceeding 12 months.

…'

13
Article 18 of Directive 93/104 is worded as follows:

'1. (a) Member States shall adopt the laws, regulations and administrative provisions necessary to comply with this Directive by 23 November 1996, or shall ensure by that date that the two sides of industry establish the necessary measures by agreement, with Member States being obliged to take any necessary steps to enable them to guarantee at all times that the provisions laid down by this Directive are fulfilled.

(b) (i) However, a Member State shall have the option not to apply Article 6, while respecting the general principles of the protection of the safety and health of workers, and provided it takes the necessary measures to ensure that:

– no employer requires a worker to work more than 48 hours over a 7-day period, calculated as an average for the reference period referred to in point 2 of Article 16, unless he has first obtained the worker's agreement to perform such work,

– no worker is subjected to any detriment by his employer because he is not willing to give his agreement to perform such work,

– the employer keeps up-to-date records of all workers who carry out such work,

– the records are placed at the disposal of the competent authorities, which may, for reasons connected with the safety and/or health of workers, prohibit or restrict the possibility of exceeding the maximum weekly working hours,

– the employer provides the competent authorities at their request with information on cases in which agreement has been given by workers to perform work exceeding 48 hours over a period of seven days, calculated as an average for the reference period referred to in point 2 of Article 16.

…'

National legislation

14
German labour law distinguishes between duty time ('Arbeitsbereitschaft'), on-call time ('Bereitschaftsdienst') and stand-by time ('Rufbereitschaft').

15
The three concepts are not defined by national legislation but their features derive from case-

law.

16
Duty time (‘Arbeitsbereitschaft’) covers the situation in which the worker must make himself available to his employer at the place of employment and is, moreover, obliged to remain continuously attentive in order to be able to act immediately should the need arise.

17
While a worker is on call (‘Bereitschaftsdienst’), he must be present at a place determined by his employer, either on or outside the latter’s premises, and must keep himself available to take up his duties if so requested by his employer but he is authorised to rest or occupy himself as he sees fit as long as his services are not required.

18
Stand-by time (‘Rufbereitschaft’) is characterised by the fact that the worker is not obliged to remain waiting in a place designated by the employer: it is sufficient for him to be reachable at any time so that he may be called upon at short notice to perform his professional tasks.

19
Under German labour law only duty time (‘Arbeitsbereitschaft’) is, as a general rule, deemed to constitute full working time. Conversely, both on-call time (‘Bereitschaftsdienst’) and stand-by time (‘Rufbereitschaft’) are categorised as rest time, save for the part of the time during which the worker has in fact performed his professional tasks.

20
The German legislation on working time and rest periods is contained in the Arbeitszeitgesetz (Law on Working Time) of 6 June 1994 (BGBl. 1994 I, p. 1170; ‘the ArbZG’), which was enacted to transpose Directive 93/104.

21
Paragraph 2(1) of the ArbZG defines working time as the period between the beginning and end of work, with the exception of breaks.

22
Paragraph 3 of the ArbZG provides:

‘Employees’ daily working time must not exceed eight hours. It may be extended to a maximum of 10 hours but only on condition that an average 8-hour working day is not exceeded over 6 calendar months or 24 weeks.’

23
Paragraph 7 of the ArbZG is worded as follows:

‘(1) Under a collective agreement, or a works agreement based on a collective agreement, provision may be made:

1. by way of derogation from Paragraph 3,

   (a)
   to extend working time beyond 10 hours per day, even without offset, where working time regularly includes significant periods of duty time (“Arbeitsbereitschaft”),

   (b)

to determine a different period of offset,

(c)

to extend working time to 10 hours per day, without offset, for a maximum period of 60 days per year,

…'

24
Paragraph 25 of the ArbZG provides:

'Where, at the date of entry into force of this law, an existing collective agreement or one continuing to produce effects after that date contains derogating rules under Paragraph 7(1) and (2) …, which exceed the maximum limits laid down in the provisions cited, those rules shall not be affected. Works agreements based on collective agreements are deemed equivalent to collective agreements such as those mentioned in the first sentence …'

25
The Tarifvertrag über die Arbeitsbedingungen für Angestellte, Arbeiter und Auszubildende des Deutschen Roten Kreuzes (Collective agreement on working conditions for German Red Cross employees, workers and apprentices; 'the DRK-TV') includes the following provision:

'Paragraph 14 Normal working time

(1)

Normal working time, exclusive of breaks, shall be on average 39 hours (from 1 April 1990 38 and a half hours) per week. As a general rule, the average weekly working time shall be calculated on the basis of a period of 26 weeks.

In the case of workers who work in rotas or on shifts a longer period may be set.

(2) Normal working time may be extended …

(a)

to 10 hours per day (49 hours per week on average) if it regularly includes duty time ("Arbeitsbereitschaft") of at least 2 hours per day on average:

(b)

to 11 hours per day (54 hours per week on average) if it regularly includes duty time ("Arbeitsbereitschaft") of at least 3 hours per day on average,

(c)

to 12 hours per day (60 hours per week on average) if the employee must merely be present at the work-place in order to carry out his duties should the need arise.

...

(5)

The employee shall be required, if so directed by his employer, to remain outside normal working hours in a particular place selected by the employer, from where he may be called to work if the need arises (on-call time, "Bereitschaftsdienst"). The employer may require such on-call service only when some work is expected but, on the basis of experience, work-free time will predominate.

...'

26
An observation in the following terms is made in respect of Paragraph 14(2) of the DRK-TV:

'Where Annex 2 concerning staff in the emergency and ambulance services applies, regard is to be had to the notice concerning Paragraph 14(2) of the [DRK-TV].'

27
Annex 2 includes special provisions under the collective agreement for staff in the emergency and ambulance services. The relevant notice provides that the maximum weekly working time of 54 hours provided for in Paragraph 14(2)(b) of the DRK-TV is to be progressively reduced. As a consequence, with effect from 1 January 1993, provision is made for the maximum period to fall from 54 to 49 hours.

The main proceedings and the questions referred for a preliminary ruling

28
Seven cases have given rise to these references for a preliminary ruling.

29
According to the documents available to the Court, the Deutsches Rotes Kreuz operates inter alia the land-based emergency service in a part of the Landkreis of Waldshut. The Deutsches Rotes Kreuz maintains the stations at Waldshut (Germany), Dettighoffen (Germany) and Bettmaringen (Germany), which are manned round the clock, and a station at Lauchringen (Germany), which is manned for 12 hours per day. Land-based emergency rescue is carried out by means of ambulances and emergency medical vehicles. An ambulance crew consists of two paramedics, whilst an emergency medical vehicle consists of an emergency worker and a doctor. When they are alerted of an emergency, these vehicles go to the relevant place in order to provide medical assistance to the patients. Subsequently, the patients are usually taken to hospital.

30
Mr Pfeiffer and Mr Nestvogel were formally employed by the Deutsches Rotes Kreuz as emergency workers, whilst the other claimants in the main proceedings were still employed by that body at the time when their actions before the national court were commenced.

31
The parties to the main proceedings are at odds in essence over whether, in calculating the period of maximum weekly working time, account should be taken of periods of duty time ('Arbeitsbereitschaft') which the workers concerned have been required to do in the course of their employment in the service of the Deutsches Rotes Kreuz.

32
The actions brought by Mr Pfeiffer and Mr Nestvogel before the Arbeitsgericht Lörrach claim payment for hours they worked in excess of 48 hours per week. They claim that they were wrongly required to work more than 48 hours per week on average from June 2000 to March 2001. As a consequence, they asked the national court to order the Deutsches Rotes Kreuz to pay them DEM 4 335.45 gross (for 156.85 hours at the overtime rate of DEM 29.91 gross) and DEM 1 841.88 gross (for 66.35 hours at the overtime rate of DEM 27.76), together with interest for late payment.

33
As regards the actions brought by the other claimants in the proceedings before the national court, they seek to determine the maximum period which they must work per week for the Deutsches Rotes Kreuz.

34
The parties to the main proceedings agreed in their various contracts of employment that the DRK-TV should apply.

35
The Arbeitsgericht Lörrach found that, on the basis of the rules of the collective agreement, weekly working time in the emergency service operated by the Deutsches Rotes Kreuz was, on average, 49 hours. Normal working time was extended pursuant to Paragraph 14(2)(b) of the DRK-TV, given the obligation of those concerned to be available for duty ('Arbeitsbereitschaft') for at least 3 hours per day on average.

36
The claimants in the main proceedings submit that the provision made by the Deutsches Rotes Kreuz to set weekly working time at 49 hours is unlawful. They rely in that connection on Directive 93/104 and on the judgment in Case C-303/98 *Simap* [2000] ECR I-7963. In their submission, Paragraph 14(2)(b) of the DRK-TV infringes Community law by providing for working time in excess of 48 hours per week. Furthermore, the rules of the collective agreement are not permissible under the derogation provided for in Paragraph 7(1)(i)(a) of the ArbZG. Indeed, the claimants in the main proceedings argue that the ArbZG does not correctly implement the provisions of Directive 93/104 in that respect. Accordingly, they submit that the derogation in the ArbZG must be interpreted in conformity with Community law and that if it is not, it does not apply at all.

37
Conversely, the Deutsches Rotes Kreuz contends that the actions should be dismissed. It maintains inter alia that its rules on the extension of working time comply with national legislation and the collective agreements.

38
With these cases before it, the Arbeitsgericht Lörrach is in doubt, first, as to whether the activity of the claimants in the main proceedings falls within the scope of Directive 93/104.

39
In the first place, Article 1(3) of Directive 93/104, which refers, as regards the directive's scope, to Article 2 of Directive 89/391, excludes from that scope a number of areas to the extent to which characteristics peculiar to certain specific activities inevitably conflict with it. However, in the referring court's view, that exclusion is intended to cover only those activities which aim to secure public safety and order, which are indispensable to the common good or which, owing to their nature, do not lend themselves to planning. It mentions, by way of example, major catastrophies. By contrast, emergency services should not be excluded from the scope of the two directives, even though emergency workers must be ready to respond round the clock, since the duties and working time of each of them remain amenable to planning.

40
Second, it is necessary to ascertain whether work in a land-based emergency service must be regarded as 'road transport' for the purposes of Article 1(3) of Directive 93/104. If that term were to be construed as including any activity in a vehicle travelling on the public highways, a

service operated by means of ambulances and emergency medical vehicles would also have to be subsumed thereunder, since a significant part of that activity entails going to places where emergencies have occurred and conveying patients to hospital. However, the emergency service normally operates within a limited geographical area, in general within a Landkreis (provincial district), so the distances are not great and the operations are of limited duration. The work of a land-based emergency service is thus to be distinguished from the typical line of work in the road transport sector. Doubts none the less subsist on this point on account of the judgment in Case C-76/97 *Tögel* [1998] ECR I-5357, paragraph 40).

41
The referring court then asks whether the non-application of the 48-hour limit for the average working week as provided for under Article 18(1)(b)(i) of Directive 93/104 requires the express and unambiguous consent of the employee concerned or whether the employee's general consent to the application of a collective agreement as a whole is sufficient, since the latter provides inter alia for the possibility of weekly working time being extended beyond the 48-hour limit.

42
Finally, the Arbeitsgericht Lörrach asks whether Article 6 of Directive 93/104 is unconditional and sufficiently precise to be capable of being relied on by an individual before a national court in the event of a Member State having failed to implement the directive correctly. Under German law, if the provision at Paragraph 14(2)(b) of the DRK-TV, which is applicable to the employment contracts concluded by the parties to the main proceedings, were covered by the provision made by the legislature in Paragraph 7(1)(i)(a) of the ArbZG, the latter would permit the employer to extend daily working time without compensation, with the result that the restriction of weekly working time to 48 hours on average which derives from Paragraph 3 of the ArbZG and from Article 6(2) of Directive 93/104 would be negated.

43
Taking the view that in those circumstances an interpretation of Community law was necessary to enable it to reach a decision in the cases before it, the Arbeitsgericht Lörrach decided to stay the proceedings and to refer to the Court for a preliminary ruling the following questions, which are cast in identical terms in Cases C-397/01 to C-403/01:

'1. (a) Is the reference in Article 1(3) of Directive 93/104 ... to Article 2(2) of Directive 89/391 ..., under which [those] directives are not applicable where characteristics peculiar to certain specific activities in the civil protection services inevitably conflict with their application, to be construed as meaning that the claimants' activity as emergency workers is caught by this exclusion?

2. In view of the judgment of the Court in ... *Simap* (paragraphs 73 and 74), is Article 18(1)(b)(i) of Directive 93/104 to be construed as meaning that consent given individually by a worker must expressly refer to the extension of working time to more than 48 hours per week, or may such consent also reside in the worker's agreeing with the employer, in the contract of employment, that working conditions are to be governed by a collective agreement which itself allows working time to be extended to more than 48 hours on average?

3. Is Article 6 of Directive 93/104 in itself unconditional and sufficiently precise to be capable of being relied on by individuals before national courts where the State has not properly transposed the directive into national law?'

44
By order of the President of the Court of 7 November 2001, Cases C-397/01 to C-403/01 were joined for the purposes of the written and oral procedure and the judgment.

45
By decision of 14 January 2003, the Court stayed proceedings in those cases until the hearing in Case C-151/02 *Jaeger* [2003] ECR I-8389, in which judgment was delivered on 9 September 2003. That hearing took place on 25 February 2003.

46
By order of the Court of 13 January 2004, the oral procedure in Cases C-397/01 to C-403/01 was re-opened.

The questions referred for a preliminary ruling

Question 1(a)

47
By Question 1(a), the national court is essentially asking whether Article 2 of Directive 89/391 and Article 1(3) of Directive 93/104 must be interpreted as meaning that the activity of emergency workers, performed within an emergency medical service such as the service at issue in the main proceedings, falls within the scope of the directives.

48
In order to reply to that question, it must be borne in mind at the outset that Article 1(3) of Directive 93/104 defines the scope of the directive by referring expressly to Article 2 of Directive 89/391. Therefore, before determining whether an activity such as that of emergency workers in attendance in an ambulance or emergency medical vehicle in the framework of a service run by the Deutsches Rotes Kreuz falls within the scope of Directive 93/104, it is first necessary to examine whether that activity is within the scope of Directive 89/391 (see the judgment in *Simap*, paragraphs 30 and 31).

49
By virtue of Article 2(1) of Directive 89/391, the latter applies to ‘all sectors of activity, both public and private’, which include service activities as a whole.

50
However, as is clear from the first subparagraph of Article 2(2), the directive is not applicable where characteristics peculiar to certain specific activities, particularly in the civil protection services, inevitably conflict with it.

51
It must none the less be held that the activity of emergency workers in attendance in an ambulance or emergency medical vehicle in the framework of an emergency service for the injured or sick, run by a body such as the Deutsches Rotes Kreuz, is not covered by the exclusion referred to in the preceding paragraph.

52
It is clear both from the purpose of Directive 89/391 (encouraging the improvement of the health and safety of workers at work) and from the wording of Article 2(1) thereof that the directive must be taken to be broad in scope. It follows that the exclusions from its scope provided for in

the first subparagraph of Article 2(2) must be interpreted restrictively (see the judgment in *Simap*, paragraphs 34 and 35, and the order of 3 July 2001 in Case C-241/99 *CIG* [2001] ECR I-5139, paragraph 29).

53
Furthermore, the first subparagraph of Article 2(2) of Directive 89/391 excludes from the directive's scope not the civil protection services as such but solely 'certain specific activities' of those services, whose characteristics are such as inevitably to conflict with the rules laid down by the directive.

54
This exclusion from the broadly-defined field of application of Directive 89/391 must therefore be interpreted in such a way that its scope is restricted to what is strictly necessary in order to safeguard the interests which it allows the Member States to protect.

55
In that regard, the exclusion in the first subparagraph of Article 2(2) of Directive 89/391 was adopted purely for the purpose of ensuring the proper operation of services essential for the protection of public health, safety and order in cases, such as a catastrophe, the gravity and scale of which are exceptional and a characteristic of which is the fact that, by their nature, they do not lend themselves to planning as regards the working time of teams of emergency workers.

56
However, the civil protection service in the strict sense thus defined, at which the provision is aimed, can be clearly distinguished from the activities of emergency workers tending the injured and sick which are at issue in the main proceedings.

57
Even if a service such as the one with which the national court is concerned must deal with events which, by definition, are unforeseeable, the activities which it entails in normal conditions and which correspond moreover to the duties specifically assigned to a service of that kind are none the less capable of being organised in advance, including, in so far as they are concerned, the working hours of its staff.

58
The service thus exhibits no characteristic which inevitably conflicts with the application of the Community rules on the protection of the health and safety of workers and therefore is not covered by the exclusion in the first subparagraph of Article 2(2) of Directive 89/391, the directive instead applying to such a service.

59
It is apparent from the wording of Article 1(3) of Directive 93/104 that it applies to all sectors of activity, both public and private, within the meaning of Article 2 of Directive 89/391, with the exception of certain specific activities which are exhaustively listed.

60
None of those activities is relevant in relation to a service such as the one at issue in the main proceedings. In particular, it is clear that the activity of workers who, in the framework of an emergency medical service, attend on patients in an ambulance or emergency medical vehicle is not comparable to the activity of trainee doctors, to which Directive 93/104 does not apply by virtue of Article 1(3) thereof.

61
Consequently, an activity such as that with which the national court is concerned also falls within the scope of Directive 93/104.

62
As the Commission rightly pointed out, further support is lent to that finding by the fact that Article 17(2), point 2.1(c)(iii), of Directive 93/104 expressly refers to, inter alia, ambulance services. Such a reference would be redundant if the activity referred to was already excluded from the scope of Directive 93/104 in its entirety by virtue of Article 1(3). Instead, that reference shows that the Community legislature laid down the principle that the directive is applicable to activities of such a kind, whilst providing for the option, in given circumstances, to derogate from certain specific provisions of the directive.

63
In those circumstances, the answer to be given to Question 1(a) is that Article 2 of Directive 89/391 and Article 1(3) of Directive 93/104 must be construed as meaning that the activity of emergency workers, carried out in the framework of an emergency medical service such as that at issue before the national court, falls within the scope of the directives.

Question 1(b)

64
By Question 1(b), the national court is essentially asking whether, on a proper construction, the concept of 'road transport' in Article 1(3) of Directive 93/104 encompasses the activity of an emergency medical service, on account of the fact that the activity consists, at least in part, of using a vehicle and attending the patient during the journey to hospital.

65
In that regard, it must be observed that under Article 1(3) of Directive 93/104, the latter '[applies] to all sectors of activity … with the exception of air, rail, road, sea, inland waterway and lake transport …'.

66
In its judgment in Case C-133/00 *Bowden and Others* [2001] ECR I-7031, the Court ruled that on a proper construction of Article 1(3) all workers employed in the road transport sector, including office staff, are excluded from the scope of that directive.

67
Since they are exceptions to the Community system for the organisation of working time put in place by Directive 93/104, the exclusions from the scope of the directive provided for in Article 1(3) must be interpreted in such a way that their scope is limited to what is strictly necessary in order to safeguard the interests which the exclusions are intended to protect (see, by analogy, the judgment in *Jaeger*, paragraph 89).

68
The transport sector was excluded from the scope of Directive 93/104 on the grounds that a Community regulatory framework already existed in that sector, which laid down specific rules for, inter alia, the organisation of working time on account of the special nature of the activity in question. That legislation does not apply, however, to transport for emergencies or assistance.

69
Furthermore, the judgment in *Bowden* is based on the fact that the employer belonged to one of

the transport sectors specifically listed in Article 1(3) of Directive 93/104 (see paragraphs 39 to 41 of the judgment). However, it can hardly be argued that when the Deutsches Rotes Kreuz operates an emergency medical service such as that at issue in the main proceedings its activity pertains to the road transport sector.

70
The fact that that activity includes using an emergency vehicle and accompanying the patient on his journey to hospital is not decisive, since the main purpose of the activity concerned is to provide initial medical treatment to a person who is ill or injured and not to carry out an operation relating to the road transport sector.

71
Furthermore, it is necessary to bear in mind that ambulance services are specifically included in Article 17(2), point 2.1(c)(iii), of Directive 93/104. Their inclusion, which is intended to enable there to be a derogation from certain specific provisions of the directive, would be redundant if such services were already excluded from the field of application of the directive in its entirety pursuant to Article 1(3) thereof.

72
In those circumstances, the concept of 'road transport' in Article 1(3) of Directive 93/104 does not encompass an emergency medical service such as that at issue in the main proceedings.

73
That interpretation is not undermined by the judgment in *Tögel*, to which the national court refers, since the subject-matter of the judgment was not the interpretation of Directive 93/104 but rather that of Council Directive 92/50/EEC of 18 June 1992 relating to the coordination of procedures for the award of public service contracts (JO 1992 L 209, p. 1), the contents and purpose of which are wholly irrelevant for the purpose of determining the scope of Directive 93/104.

74
In the light of all of the foregoing considerations, the answer to Question 1(b) must be that, on a proper construction, the concept of 'road transport' in Article 1(3) of Directive 93/104 does not encompass the activity of an emergency medical service, even though the latter includes using a vehicle and accompanying a patient on his journey to hospital.

The second question

75
By its second question, the national court is asking in substance whether the first indent of Article 18(1)(b)(i) of Directive 93/104 is to be construed as requiring consent to be expressly and freely given by each worker individually if the 48-hour maximum period of weekly working time, as laid down in Article 6 of the directive, is to be validly extended or whether it is sufficient in that regard that the relevant person's employment contract refers to a collective agreement which permits such an extension.

76
In order to reply to the question formulated in this manner, it must be borne in mind, first, that it is apparent from Article 118a of the Treaty, the legal basis for Directive 93/104, from the first, fourth, seventh and eighth recitals in the preamble to the directive and from the actual wording of Article 1(1) of the directive that its objective is to guarantee the better protection of the safety and health of workers by affording them minimum rest periods – especially on a daily and

weekly basis –and adequate breaks and by providing for an upper limit on weekly working time.

77
Second, under the system established by Directive 93/104, only some of its provisions, which are exhaustively listed, may form the subject-matter of derogations by the Member States or the two sides of industry. Furthermore, the implementation of such derogations is subject to strict conditions intended to secure effective protection for the safety and health of workers.

78
Thus, Article 18(1)(b)(i) of Directive 93/104 provides that Member States have the right not to apply Article 6 provided that they observe the general principles of the protection of the safety and health of workers and that they satisfy a certain number of conditions set out cumulatively in Article 18(1)(b)(i).

79
In particular, the first indent of Article 18(1)(b)(i) requires that working time should not exceed 48 hours over a 7-day period, calculated as an average for the reference period referred to in point 2 of Article 16 of Directive 93/104, the worker none the less being able to agree to work more than 48 hours per week.

80
In that regard, the Court has already held, in paragraph 73 of the judgment in *Simap*, that, as is apparent from its actual wording, the first indent of Article 18(1)(b)(i) of Directive 93/104 requires the consent of the individual worker.

81
In paragraph 74 of *Simap*, the Court concluded that the consent given by trade-union representatives in the context of a collective or other agreement is not equivalent to that given by the worker himself, as provided for in the first indent of Article 18(1)(b)(i) of Directive 93/104.

82
That interpretation derives from the objective of Directive 93/104, which seeks to guarantee the effective protection of the safety and health of workers by ensuring that they actually have the benefit of, inter alia, an upper limit on weekly working time and minimum rest periods. Any derogation from those minimum requirements must therefore be accompanied by all the safeguards necessary to ensure that, if the worker concerned is encouraged to relinquish a social right which has been directly conferred on him by the directive, he must do so freely and with full knowledge of all the facts. Those requirements are all the more important given that the worker must be regarded as the weaker party to the employment contract and it is therefore necessary to prevent the employer being in a position to disregard the intentions of the other party to the contract or to impose on that party a restriction of his rights without him having expressly given his consent in that regard.

83
Those considerations are equally relevant so far as the situation described in the second question is concerned.

84
It follows that, for a derogation from the maximum period of weekly working time laid down in Article 6 of Directive 93/104 (48 hours) to be valid, the worker's consent must be given not only individually but also expressly and freely.

85
Those conditions are not met where the worker's employment contract merely refers to a collective agreement authorising an extension of maximum weekly working time. It is by no means certain that, when he entered into such a contract, the worker concerned knew of the restriction of the rights conferred on him by Directive 93/104.

86
The answer to the second question must therefore be that the first indent of Article 18(1)(b)(i) of Directive 93/104 is to be construed as requiring consent to be expressly and freely given by each worker individually if the 48-hour maximum period of weekly working time, as laid down in Article 6 of the directive, is to be validly extended. In that connection, it is not sufficient that the relevant worker's employment contract refers to a collective agreement which permits such an extension.

The third question

87
By its third question, the national court is essentially asking whether, if Directive 93/104 has been implemented incorrectly, Article 6(2) thereof may be taken to have direct effect.

88
As is clear both from its wording and from the context in which it occurs, there are two aspects to that question: the first concerns the interpretation of Article 6(2) of Directive 93/104 for the purpose of enabling the national court to decide whether the relevant rules of national law are compatible with the requirements of Community law, whilst the second concerns whether, if the Member State concerned has transposed Article 6(2) into national law incorrectly, that provision satisfies the conditions which would enable an individual to rely on it before the national courts in circumstances such as those in the main proceedings.

89
Those two issues must be examined in turn.

The import of Article 6(2) of Directive 93/104

90
As a preliminary point, it must be observed that Article 6(2) of Directive 93/104 requires the Member States to take the measures necessary to ensure, as a function of the requirement for the protection of workers' safety and health, that the average working time for each 7-day period, including overtime, does not exceed 48 hours.

91
It is apparent from Article 118a of the Treaty, which is the legal basis for Directive 93/104, from the first, fourth, seventh and eighth recitals in the preamble to the directive, from the Community Charter of the Fundamental Social Rights of Workers, adopted at the meeting of the European Council held at Strasbourg on 9 December 1989, points 8 and 19, first subparagraph, thereof, which are referred to in the fourth recital to the directive, and from the actual wording of Article 1(1) of the directive that the latter's purpose is to lay down minimum requirements intended to improve the living and working conditions of workers through approximation of national provisions concerning, in particular, the duration of working time. This Community-level harmonisation of the organisation of working time seeks to guarantee a better level of protection of the safety and health of workers by ensuring that they are entitled to minimum rest periods – particularly daily and weekly – and adequate breaks (see *Jaeger*, paragraphs 45 to

47).

92
Thus, Directive 93/104 imposes more specifically (in Article 6(2)) a 48-hour limit for the average working week, a maximum which is expressly stated to include overtime.

93
In that context, the Court has already held that on-call time ('Bereitschaftsdienst'), where the worker is required to be physically present at a place specified by his employer, must be regarded as wholly working time for the purposes of Directive 93/104, irrespective of the fact that, during periods of on-call time, the person concerned is not continuously carrying on any professional activity (see *Jaeger*, paragraphs 71, 75 and 103).

94
The same must be true of periods of duty time ('Arbeitsbereitschaft') completed by emergency workers in the framework of an emergency service, which necessarily entails periods of inactivity of varying length in between calls.

95
Such periods of duty time must accordingly be taken into account in their totality in the calculation of maximum daily and weekly working time.

96
Furthermore, it is evident that under the system established by Directive 93/104, although Article 15 allows generally for the application or introduction of national provisions more favourable to the protection of the safety and health of employees, only certain specifically mentioned provisions of the directive may form the subject-matter of derogations by the Member States or social partners (see *Jaeger*, paragraph 80).

97
However, in the first place, Article 6 of Directive 93/104 is referred to only in Article 17(1) and it is undisputed that the latter provision covers activities which bear no relation at all to those carried out by emergency workers such as the claimants in the main proceedings. By contrast, Article 17(2), point 2.1(c)(iii), refers to 'activities involving the need for continuity of service', including in particular 'ambulance services', but this provision gives scope for derogating from only Articles 3, 4, 5, 8 and 16 of the directive.

98
In the second place, Article 18(1)(b)(i) of Directive 93/104 provides that the Member States have the right not to apply Article 6 provided that they observe the general principles of protection of the safety and health of workers and that they satisfy a number of conditions set out cumulatively in Article 18(1)(b)(i), but it is not disputed that the Federal Republic of Germany has not availed itself of that option to derogate (see *Jaeger*, paragraph 85).

99
Moreover, by virtue of the Court's case-law the Member States cannot unilaterally determine the scope of the provisions of Directive 93/104 by attaching conditions or restrictions to the implementation of the workers' right under Article 6(2) of the directive not to work more than 48 hours per week (see, to that effect, *Jaeger*, paragraphs 58 and 59). Any other interpretation would misconstrue the purpose of the directive, which is intended to secure effective protection of the safety and health of workers by allowing them to enjoy minimum periods of rest (see *Jaeger*, paragraphs 70 and 92).

100
In those circumstances, it must be concluded that, in view of both the wording of Article 6(2) of Directive 93/104 and the purpose and scheme of the directive, the 48-hour upper limit on average weekly working time, including overtime, constitutes a rule of Community social law of particular importance from which every worker must benefit, since it is a minimum requirement necessary to ensure protection of his safety and health (see, by analogy, Case C-173/99 *BECTU* [2001] ECR I-4881, paragraphs 43 and 47), and therefore national legislation, such as that at issue in the main proceedings, which authorises weekly working time in excess of 48 hours, including periods of duty time ('Arbeitsbereitschaft'), is not compatible with the requirements of Article 6(2) of the directive.

101
Accordingly, the answer to the third question, as regards the first aspect, is that Article 6(2) of Directive 93/104 must be interpreted, in circumstances such as those in the main proceedings, as precluding legislation in a Member State the effect of which, as regards periods of duty time ('Arbeitsbereitschaft') completed by emergency workers in the framework of the emergency medical service of a body such as the Deutsches Rotes Kreuz, is to permit, including by means of a collective agreement or works agreement based on such an agreement, the 48-hour maximum period of weekly working time laid down by that provision to be exceeded.

The direct effect of Article 6(2) Directive 93/104 and the ensuing consequences in the cases before the national court

102
Since, in circumstances such as those in the main proceedings, the relevant national legislation is not compatible with the requirements of Directive 93/104 as regards maximum weekly working time, it remains to be considered whether Article 6(2) of the directive fulfils the conditions for it to have direct effect.

103
In that regard, it is clear from the settled case-law of the Court that, whenever the provisions of a directive appear, so far as their subject-matter is concerned, to be unconditional and sufficiently precise, they may be relied upon before the national courts by individuals against the State where the latter has failed to implement the directive in domestic law by the end of the period prescribed or where it has failed to implement the directive correctly (see, inter alia, Joined Cases C-6/90 and C-9/90 *Francovich and Others* [1991] ECR I-5357, paragraph 11, and Case C-62/00 *Marks & Spencer* [2002] ECR I-6325, paragraph 25).

104
Article 6(2) of Directive 93/104 satisfies those criteria, since it imposes on Member States in unequivocal terms a precise obligation as to the result to be achieved, which is not coupled with any condition regarding application of the rule laid down by it, which provides for a 48-hour maximum, including overtime, as regards average weekly working time.

105
Even though Directive 93/104 leaves the Member States a degree of latitude when they adopt rules in order to implement it, particularly as regards the reference period to be fixed for the purposes of applying Article 6 of that directive, and even though it also permits them to derogate from Article 6, those factors do not alter the precise and unconditional nature of Article 6(2). First, it is clear from the wording of Article 17(4) of the directive that the reference period can never exceed 12 months and, second, the Member States' right not to apply Article 6 is subject to compliance with all the conditions set out in Article 18(1)(b)(i) of the directive. It is

therefore possible to determine the minimum protection which must be provided in any event (see, to that effect, *Simap*, paragraphs 68 and 69).

106
As a consequence, Article 6(2) of Directive 93/104 fulfils all the conditions necessary for it to produce direct effect.

107
It still remains to determine the legal consequences which a national court must derive from that interpretation in circumstances such as those in the main proceedings, which involve individuals.

108
In that regard, the Court has consistently held that a directive cannot of itself impose obligations on an individual and cannot therefore be relied upon as such against an individual (see, inter alia, Case 152/84 *Marshall* [1986] ECR 723, paragraph 48; Case C-91/92 *Faccini Dori* [1994] ECR I-3325, paragraph 20; and Case C-201/02 *Wells* [2004] ECR I-0000, paragraph 56).

109
It follows that even a clear, precise and unconditional provision of a directive seeking to confer rights or impose obligations on individuals cannot of itself apply in proceedings exclusively between private parties.

110
However, it is apparent from case-law which has also been settled since the judgment of 10 April 1984 in Case 14/83 *Von Colson and Kamann* [1984] ECR 1891, paragraph 26, that the Member States' obligation arising from a directive to achieve the result envisaged by the directive and their duty under Article 10 EC to take all appropriate measures, whether general or particular, to ensure the fulfilment of that obligation is binding on all the authorities of Member States including, for matters within their jurisdiction, the courts (see, inter alia, Case C-106/89 *Marleasing* [1990] ECR I-4135, paragraph 8; *Faccini Dori*, paragraph 26; Case C-126/96 *Inter-Environnement Wallonie* [1997] ECR I-7411, paragraph 40; and Case C-131/97 *Carbonari and Others* [1999] ECR I-1103, paragraph 48).

111
It is the responsibility of the national courts in particular to provide the legal protection which individuals derive from the rules of Community law and to ensure that those rules are fully effective.

112
That is *a fortiori* the case when the national court is seised of a dispute concerning the application of domestic provisions which, as here, have been specifically enacted for the purpose of transposing a directive intended to confer rights on individuals. The national court must, in the light of the third paragraph of Article 249 EC, presume that the Member State, following its exercise of the discretion afforded it under that provision, had the intention of fulfilling entirely the obligations arising from the directive concerned (see Case C-334/92 *Wagner Miret* [1993] ECR I-6911, paragraph 20).

113
Thus, when it applies domestic law, and in particular legislative provisions specifically adopted for the purpose of implementing the requirements of a directive, the national court is bound to interpret national law, so far as possible, in the light of the wording and the purpose of the

directive concerned in order to achieve the result sought by the directive and consequently comply with the third paragraph of Article 249 EC (see to that effect, inter alia, the judgments cited above in *Von Colson and Kamann*, paragraph 26; *Marleasing*, paragraph 8, and *Faccini Dori*, paragraph 26; see also Case C-63/97 *BMW* [1999] ECR I-905, paragraph 22; Joined Cases C-240/98 to C-244/98 *Océano Grupo Editorial and Salvat Editores* [2000] ECR I-4941, paragraph 30; and Case C-408/01 *Adidas-Salomon and Adidas Benelux* [2003] ECR I-0000, paragraph 21).

114
The requirement for national law to be interpreted in conformity with Community law is inherent in the system of the Treaty, since it permits the national court, for the matters within its jurisdiction, to ensure the full effectiveness of Community law when it determines the dispute before it (see, to that effect, Case C-160/01 *Mau* [2003] ECR I-4791, paragraph 34).

115
Although the principle that national law must be interpreted in conformity with Community law concerns chiefly domestic provisions enacted in order to implement the directive in question, it does not entail an interpretation merely of those provisions but requires the national court to consider national law as a whole in order to assess to what extent it may be applied so as not to produce a result contrary to that sought by the directive (see, to that effect, *Carbonari*, paragraphs 49 and 50).

116
In that context, if the application of interpretative methods recognised by national law enables, in certain circumstances, a provision of domestic law to be construed in such a way as to avoid conflict with another rule of domestic law or the scope of that provision to be restricted to that end by applying it only in so far as it is compatible with the rule concerned, the national court is bound to use those methods in order to achieve the result sought by the directive.

117
In such circumstances, the national court, when hearing cases which, like the present proceedings, fall within the scope of Directive 93/104 and derive from facts postdating expiry of the period for implementing the directive, must, when applying the provisions of national law specifically intended to implement the directive, interpret those provisions so far as possible in such a way that they are applied in conformity with the objectives of the directive (see, to that effect, the judgment in Case C-456/98 *Centrosteel* [2000] ECR I-6007, paragraphs 16 and 17).

118
In this instance, the principle of interpretation in conformity with Community law thus requires the referring court to do whatever lies within its jurisdiction, having regard to the whole body of rules of national law, to ensure that Directive 93/104 is fully effective, in order to prevent the maximum weekly working time laid down in Article 6(2) of the directive from being exceeded (see, to that effect, *Marleasing*, paragraphs 7 and 13).

119
Accordingly, it must be concluded that, when hearing a case between individuals, a national court is required, when applying the provisions of domestic law adopted for the purpose of transposing obligations laid down by a directive, to consider the whole body of rules of national law and to interpret them, so far as possible, in the light of the wording and purpose of the directive in order to achieve an outcome consistent with the objective pursued by the directive. In the main proceedings, the national court must thus do whatever lies within its jurisdiction to ensure that the maximum period of weekly working time, which is set at 48 hours by Article 6(2)

of Directive 93/104, is not exceeded.

120
In view of all the foregoing reasoning, the answer to the third question must be that:

– Article 6(2) of Directive 93/104 must be interpreted, in circumstances such as those in the main proceedings, as precluding legislation in a Member State the effect of which, as regards periods of duty time ('Arbeitsbereitschaft') completed by emergency workers in the framework of the emergency medical service of a body such as the Deutsches Rotes Kreuz, is to permit, including by means of a collective agreement or works agreement based on such an agreement, the 48-hour maximum period of weekly working time laid down by that provision to be exceeded;

– the provision fulfils all the conditions necessary for it to have direct effect;

– when hearing a case between individuals, the national court is required, when applying the provisions of domestic law adopted for the purpose of transposing obligations laid down by a directive, to consider the whole body of rules of national law and to interpret them, so far as possible, in the light of the wording and purpose of the directive in order to achieve an outcome consistent with the objective pursued by the directive. In the main proceedings, the national court must thus do whatever lies within its jurisdiction to ensure that the maximum period of weekly working time, which is set at 48 hours by Article 6(2) of Directive 93/104, is not exceeded.

Costs

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Since these proceedings are, for the parties to the main proceedings, a step in the actions pending before the national court, the decision on costs is a matter for that court. The costs incurred by parties other than those to the main proceedings in submitting observations to the Court are not recoverable.

On those grounds, the Court (Grand Chamber) rules:

1. (a) Article 2 of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work and Article 1(3) of Council Directive 93/104/EC of 23 November 1993 concerning certain aspects of the organisation of working time must be construed as meaning that the activity of emergency workers, carried out in the framework of an emergency medical service, such as that at issue before the national court, falls within the scope of the directives.

b) On a proper construction, the concept of 'road transport' in Article 1(3) of Directive 93/104 does not encompass the activity of an emergency medical service, even though the latter includes using a vehicle and accompanying a patient on the journey to hospital.

2. – The first indent of Article 18(1)(b)(i) of Directive 93/104 is to be construed as

requiring consent to be expressly and freely given by each worker individually if the 48-hour maximum period of weekly working time, as laid down in Article 6 of the directive, is to be validly extended. In that connection, it is not sufficient that the relevant worker's employment contract refers to a collective agreement which permits such an extension.

3. − **Article 6, point 2, of Directive 93/104 must be interpreted, in circumstances such as those in the main proceedings, as precluding legislation in a Member State the effect of which, as regards periods of duty time ('Arbeitsbereitschaft') completed by emergency workers in the framework of the emergency medical service of a body such as the Deutsches Rotes Kreuz, is to permit, including by means of a collective agreement or works agreement based on such an agreement, the 48-hour maximum period of weekly working time laid down by that provision to be exceeded;**

Signatures.

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1 – Language of the case: German.

JUDGMENT OF THE COURT (First Chamber)

24 June 2004 *

In Case C-350/02,

Commission of the European Communities, represented by M. Shotter and W. Wils, acting as Agents, with an address for service in Luxembourg,

applicant,

v

Kingdom of the Netherlands, represented by S. Terstal, acting as Agent,

defendant,

APPLICATION for a declaration that, by failing to adopt all the laws, regulations and administrative provisions necessary to transpose into national law Articles 6 and 9 of Directive 97/66/EC of the European Parliament and of the Council of 15

* Language of the case: Dutch.

December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector (OJ 1998 L 24, p. 1) or, at least, by not communicating those provisions to the Commission, the Kingdom of the Netherlands has failed to fulfil its obligations under the EC Treaty,

THE COURT (First Chamber),

composed of: P. Jann, President of the Chamber, A. La Pergola, S. von Bahr, R. Silva de Lapuerta and K. Lenaerts (Rapporteur), Judges,

Advocate General: J. Kokott,
Registrar: M.-F. Contet, Principal Administrator,

having regard to the Report for the Hearing,

after hearing oral argument from the parties at the hearing on 13 November 2003 at which the Commission was represented by W. Wils, assisted by P. Gerard, expert, and the Kingdom of the Netherlands, by C. Wissels, acting as Agent, assisted by R.J. I. Dielemans, expert,

after hearing the Opinion of the Advocate General at the sitting on 29 January 2004,

gives the following

Judgment

1 By application lodged at the Court Registry on 1 October 2002, the Commission of the European Communities brought an action under Article 226 EC for a declaration that, by failing to adopt all the laws, regulations and administrative provisions necessary to transpose into national law Articles 6 and 9 of Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector (OJ 1998 L 24, p. 1) or, at least, by not communicating those provisions to the Commission, the Kingdom of the Netherlands has failed to fulfil its obligations under the EC Treaty.

Legal framework

Community provisions

2 Under Article 1(1) thereof, Directive 97/66, which was in force at the material time, provided for 'the harmonisation of the provisions of the Member States required to

ensure an equivalent level of protection of fundamental rights and freedoms, and in particular the right to privacy, with respect to the processing of personal data in the telecommunications sector and to ensure the free movement of such data and of telecommunications equipment and services in the Community'.

3 Article 6 of Directive 97/66 provided:

'1. Traffic data relating to subscribers and users processed to establish calls and stored by the provider of a public telecommunications network and/or publicly available telecommunications service must be erased or made anonymous upon termination of the call without prejudice to the provisions of paragraphs 2, 3 and 4.

2. For the purpose of subscriber billing and interconnection payments, data indicated in the Annex may be processed. Such processing is permissible only up to the end of the period during which the bill may lawfully be challenged or payment may be pursued.

3. For the purpose of marketing its own telecommunications services, the provider of a publicly available telecommunications service may process the data referred to in paragraph 2, if the subscriber has given his consent.

4. Processing of traffic and billing data must be restricted to persons acting under the authority of providers of the public telecommunications networks and/or publicly available telecommunications services handling billing or traffic management, customer enquiries, fraud detection and marketing the provider's own telecommunications services and it must be restricted to what is necessary for the purposes of such activities.

5. Paragraphs 1, 2, 3 and 4 shall apply without prejudice to the possibility for competent authorities to be informed of billing or traffic data in conformity with applicable legislation in view of settling disputes, in particular interconnection or billing disputes.'

4 Article 9 of Directive 97/66 was worded as follows:

'Member States shall ensure that there are transparent procedures governing the way in which a provider of a public telecommunications network and/or a publicly available telecommunications service may override the elimination of the presentation of calling line identification:

(a) on a temporary basis, upon application of a subscriber requesting the tracing of malicious or nuisance calls; in this case, in accordance with national law, the

data containing the identification of the calling subscriber will be stored and be made available by the provider of a public telecommunications network and/or publicly available telecommunications service;

(b) on a per-line basis for organisations dealing with emergency calls and recognised as such by a Member State, including law enforcement agencies, ambulance services and fire brigades, for the purpose of answering such calls.'

5 The annex to Directive 97/66 stated:

'For the purpose referred to in Article 6(2) the following data may be processed:

Data containing the:

— number or identification of the subscriber station,

— address of the subscriber and the type of station,

— total number of units to be charged for the accounting period,

— called subscriber number,

— type, starting time and duration of the calls made and/or the data volume transmitted,

— date of the call/service,

— other information concerning payments such as advance payment, payments by instalments, disconnection and reminders.'

6 Under the first subparagraph of Article 15(1) of Directive 97/66 the Member States were to bring into force the laws, regulations and administrative provisions necessary for them to comply with this directive not later than 24 October 1998. Under Article 15(4) thereof, the Member States were to communicate to the Commission the text of the provisions of national law adopted by them in the field governed by the directive.

National provisions

7 The Wet houdende regels inzake de telecommunicatie (law governing the telecommunications sector, hereinafter the 'Telecommunicatiewet'), promulgated on 19 October 1998 (*Staatsblad* 1998, p. 610), contains a Chapter 11 seeking to transpose Directive 97/66.

8 Article 11(5) of the Telecommunicatiewet, which concerns the transposition of Article 6 of Directive 97/66, is worded as follows:

'1. In order to safeguard personal and private data, providers of a public telecommunications network and providers of a public telecommunications network shall ensure that, upon termination of a communication, traffic data processed concerning subscribers and users, as may be determined by general administrative measure, are to be subject to erasure or anonymity.

2. By way of exception to paragraph 1 above, traffic data may be processed only if and in so far as is necessary:

(a) to calculate the bill of a subscriber or of the person who has undertaken in law to the provider to pay that bill, or for the purpose of payments for interconnection or other forms of access;

(b) to enable the provider to undertake market research or to market its own telecommunications services, if the subscriber has given his consent thereto;

(c) to examine disputes or determine them under Article 12(1) or to define the rules under Article 6(3),

(d) to manage traffic,

(e) to provide customers with traffic data provided such data relates to such customers,

(f) to detect fraud; or

(g) it is lawful by or under a law.

3. Measures implementing this article shall be adopted by general administrative measure. Such provisions may relate only to data which may be processed in conjunction with traffic data, to the purposes for which processing may take place, to the period within which processing is lawful, and to the persons who may be entrusted with processing.'

Pre-litigation procedure

9 By letter of 7 January 1999 the Kingdom of the Netherlands communicated to the Commission the text of the Telecommunicatiewet, stating that it should be regarded as constituting the transposition into national law of Directive 97/66.

10 In accordance with Article 226 EC, the Commission, taking the view that the Telecommunicatiewet did not correctly transpose Articles 6, 9, 11 and 12 of Directive 97/66, put the Kingdom of the Netherlands on formal notice to submit its observations.

11 By letter of 8 January 2001 the Netherlands Government replied to that letter of formal notice, stating in particular that legislative measures were being drawn up which would fully satisfy its obligations under Directive 97/66.

12 On 18 July 2001 the Commission sent the Kingdom of the Netherlands a reasoned opinion in which it submitted that, upon examination of the national provisions at issue and the legislative measures being drawn up, it was of the view that the Netherlands had failed to fulfil its obligations under Articles 6 and 9 of Directive 97/66. The Kingdom of the Netherlands was requested to comply with that reasoned opinion within a period of two months of its notification.

13 The Kingdom of the Netherlands replied to the reasoned opinion by letter of 29 October 2001. Since it was not satisfied by that reply, the Commission decided to bring this action.

The action

Admissibility

14 In support of its application, the Commission raised four grounds of complaint concerning the Netherlands legislation transposing directive 97/66. Three of them relate to Article 6 of the directive and the fourth to Article 9 thereof.

15 One of the grounds of complaint relating to Article 6 of Directive 97/66 alleges the incorrect transposition in Article 11(5)(2) of the Telecommunicatiewet of Article 6 (2) to (5) of the directive. The Commission maintains that the provision of Netherlands law is not in conformity with Directive 97/66 inasmuch as it provides for a greater number of derogations from the principle laid down in Article 6(1) of the directive than are permitted under the terms thereof.

16 The Kingdom of the Netherlands argues that that ground of complaint was not mentioned in the reasoned opinion and is therefore inadmissible.

17 At the hearing the Commission submitted that the reasoned opinion had to be read in the light of the letter of formal notice which expressly mentioned the ground of complaint at issue.

18 In that regard it should be pointed out that in an action for failure to fulfil obligations the purpose of the pre-litigation procedure is to give the Member State

concerned an opportunity, on the one hand, to comply with its obligations under Community law and, on the other, to avail itself of its right to defend itself against the charges formulated by the Commission (see, in particular, Case 293/85 *Commission* v *Belgium* [1988] ECR 305, paragraph 13; Case C-96/95 *Commission* v *Germany* [1997] ECR I-1653, paragraph 22; and Case C-439/99 *Commission* v *Italy* [2002] ECR I-305, paragraph 10).

19 The proper conduct of that procedure constitutes an essential guarantee required by the Treaty not only in order to protect the rights of the Member State concerned, but also so as to ensure that any contentious procedure will have a clearly defined dispute as its subject-matter (see Case C-1/00 *Commission* v *France* [2001] ECR I-9989, paragraph 53, and Case C-287/00 *Commission* v *Germany* [2002] ECR I-5811, paragraph 17).

20 It follows that the subject-matter of proceedings under Article 226 EC is delimited by the pre-litigation procedure governed by that provision. The Commission's reasoned opinion and the application must be based on the same grounds and pleas, with the result that the Court cannot examine a ground of complaint which was not formulated in the reasoned opinion (Case 76/86 *Commission* v *Germany* [1989] ECR 1021, paragraph 8), which for its part must contain a cogent and detailed exposition of the reasons which led the Commission to the conclusion that the Member State concerned had failed to fulfil one of its obligations under the Treaty (see, in particular, *Commission* v *Italy*, paragraph 12, and Case C-287/00 *Commission* v *Germany*, paragraph 19).

21 It should also be emphasised that, whilst the formal letter of notice which comprises an initial succinct résumé of the alleged infringement, may be useful in construing the reasoned opinion, the Commission is none the less obliged to specify precisely in that opinion the grounds of complaint which it already raised more generally in the

letter of formal notice and alleges against the Member State concerned, after taking cognizance of any observations submitted by it under the first paragraph of Article 226 EC. That requirement is essential in order to delimit the subject-matter of the dispute prior to any initiation of the contentious procedure provided for in the second paragraph of Article 226 and in order to ensure that the Member State in question is accurately apprised of the grounds of complaint maintained against it by the Commission and can thus bring an end to the alleged infringements or put forward its arguments in defence prior to any application to the Court by the Commission.

22 In the present case it must be stated that in the letter of formal notice of 6 November 2000 the Commission set out three specific grounds of complaint concerning the transposition into Netherlands law of Article 6 of Directive 97/66. The first ground of complaint concerns the transposition of Article 6(1) of Directive 97/66 by Article 11(5)(1) of the Telecommunicatiewet. The second ground of complaint relates to the non-conformity of Article 11(5)(2) of the Telecommunicatiewet with Article 6(2) to (5) of Directive 97/66 and alleges that the Netherlands provision includes more derogations than those permitted by those paragraphs of Article 6. The third ground of complaint alleges a failure to notify the implementing provisions mentioned at Article 11(5)(3) of the Telecommunicatiewet.

23 In its reply of 8 January 2001 to the letter of formal notice, the Netherlands Government acknowledged that the grounds of complaint concerning transposition of Article 6(1) of Directive 97/66 and the failure to notify the implementing provisions mentioned in Article 11(5)(3) of the Telecommunicatiewet were well founded, at the same time pointing out that legislative measures were being drawn up in order to correct those deficiencies. Conversely, the Netherlands Government denied that Article 11(5)(2) of the Telecommunicatiewet provides for more derogations than those permitted by Article 6(2) to (5) of that directive.

24 It cannot but be noted that the Commission did not reproduce in its reasoned opinion of 18 July 2001 the ground of complaint based on the incorrect transposition of Article 6(2) to (5) of Directive 97/66 by Article 11(5)(2) of the Telecommunicatiewet. Furthermore, that reasoned opinion does not include any assessment concerning the objections formulated concerning that ground of complaint by the Netherlands authorities in their reply to the letter of formal notice.

25 In the reasoned opinion the Commission relies solely on the incompleteness of the transposition of Article 6 of Directive 97/66 owing to the fact the legislative measures mentioned in the reply by the Netherlands Government to the letter of formal notice were not communicated to it. Unlike the letter of formal notice, the reasoned opinion gives no indication such as to convey that Article 11(5)(2) of the Telecommunicatiewet is not in conformity with the provisions of Article 6(2) to (5) of that directive. Although the reasoned opinion refers to Article 6(1) thereof, and to the implementing provisions mentioned in Article 11(5)(3) of the Telecommunicatiewet, conversely it refers neither to paragraphs 2 to 5 of that article nor to paragraph 2 of Article 11(5).

26 In its reasoned opinion, the Commission accordingly clearly gave the impression that, unlike the two other grounds of complaint concerning Article 6 of Directive 97/66 mentioned in the letter of formal notice, the ground of complaint based on the incorrect transposition of paragraphs 2 to 5 of that provision by Article 11(5)(2) of the Telecommunicatiewet had been abandoned, in the same way as the grounds of complaint concerning transposition of Articles 11 and 12 of that directive. Thus, in their reply of 29 October 2001 to that reasoned opinion, the Netherlands authorities merely gave an account of progress in the enactment of the legislation mentioned in their letter of 8 January 2001 without expressing a view on the ground of complaint at issue.

27 The general reference to the letter of formal notice in the reasoned opinion in regard to Article 6 of Directive 97/66 cannot in that context be regarded as a sufficient indication enabling the Kingdom of the Netherlands to understand that the Commission had maintained against it the ground of complaint alleging incorrect transposition of Article 6(2) to (5) of that directive.

28 Under those circumstances the ground of complaint alleged in the Commission's application concerning the incorrect transposition of Article 6(2) to (5) of Directive 97/66 by Article 11(5)(2) of the Telecommunicatiewet must be regarded as irregular inasmuch as, on the one hand, it constitutes an extension of the subject-matter of the dispute as opposed to its extent as specified in the reasoned opinion and inasmuch as, on the other, the Kingdom of the Netherlands was deprived, owing to the failure to mention that ground of complaint in that opinion, of the opportunity of bringing an end to the infringement of which it was accused or of explaining itself in that regard prior to an application to the Court by the Commission.

29 Accordingly, the action must be declared inadmissible in so far as it concerns the ground of complaint alleging incorrect transposition of Article 6(2) to (5) of Directive 97/66 by Article 11(5)(2) of the Telecommunicatiewet.

Substance

30 The three other grounds of complaint formulated in the application are based, in the case of the first two, on the incomplete transposition of Article 6 of Directive 97/66 and, in the case of the third, on the incomplete transposition of Article 9 of that directive.

31 Before those complaints are examined, it should be recalled at the outset that, as the Court has repeatedly held, the question whether a Member State has failed to fulfil its obligations must be determined as at the end of the period laid down in the reasoned opinion (see, inter alia, Case C-384/97 *Commission* v *Greece* [2000] ECR I-3823, paragraph 35, and Case C-152/98 *Commission* v *Netherlands* [2001] ECR I-3463, paragraph 21).

32 Accordingly, the matters relied on by the Netherlands in its pleadings concerning, on the one hand, repeal of Directive 97/66 by Article 19 of Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) (OJ 2002 L 201, p. 37) with effect from 31 October 2003 and, on the other, the existence of a bill to transpose the latter directive into Netherlands law, cannot affect the assessment to be made of the obligations of the Kingdom of the Netherlands as at expiry of the period of two months laid down in the reasoned opinion.

Grounds of complaint concerning incomplete transposition of Article 6 of Directive 97/66

33 In the first place, the Commission maintains that Article 11(5)(1) of the Telecommunicatiewet derogates from the general principle set out in Article 6(1) of Directive 97/66. It stresses that for that national provision to be in conformity with that directive the general administrative measure envisaged should include an exhaustive list of information. Since no measure containing such a list was communicated to it, the Commission considers that Article 6 of Directive 97/66 was not completely transposed.

34 Since the Netherlands Government acknowledges that not all the provisions necessary for the transposition of Article 6(1) of Directive 97/66 have been adopted, the ground of complaint raised by the Commission must be regarded as well founded.

35 Secondly, the Commission submits that, although Article 11(5)(3) of the Telecommunicatiewet refers to implementing provisions, none of them have been communicated to it. Consequently, it is of the view that Article 6 of Directive 97/66 was not fully transposed.

36 The Netherlands authorities retort that, since those implementing provisions have not been adopted, they could not be communicated to the Commission.

37 None the less, it should be pointed out that the Netherlands Government does not dispute that, in light of the wording in force at that time of Article 11(5) of the Telecommunicatiewet, the adoption of the implementing provisions mentioned in paragraph 3 of that article was necessary in order to support a finding that Article 6 of Directive 97/66 had been fully transposed.

38 Given that, first, the Netherlands Government has acknowledged that, as at the expiry of the period laid down in the reasoned opinion, the implementing provisions at issue had not been communicated to the Commission and that, second, failure to

adopt those provisions by that date cannot reasonably be relied on to justify that infringement, it must be concluded that the ground of complaint raised by the Commission is well founded.

39 It follows from the foregoing that the Commission is legally entitled to take the view that Article 6 of Directive 97/66 has not been fully transposed into Netherlands law on the ground that, on the one hand, Article 11(5)(1) of the Telecommunicatiewet refers to a list of information to be determined by a general administrative measure which was not communicated to it and that, second, the implementing provisions mentioned in paragraph 3 of Article 11(5) aforesaid were not communicated to it.

Ground of complaint based on the incomplete transposition of Article 9 of Directive 97/66

40 The Commission alleges that Article 9(a) of Directive 97/66 has not been transposed into Netherlands law with the result that that article has not been fully transposed.

41 Since there have in fact been no Netherlands provisions transposing Article 9(a) of Directive 97/66, as the Netherlands Government has moreover acknowledged, the

Commission's ground of complaint alleging incomplete transposition of Article 9 aforesaid must be regarded as well founded.

42 It must therefore be held that, by incompletely transposing Article 6 of Directive 97/66, in that, first, Article 11(5)(1) of the Telecommunicatiewet refers to a general administrative measure which was not communicated to the Commission and in that, second, the implementing provisions mentioned in Article 11(5)(3) of the Telecommunicatiewet were not communicated to the Commission, and by incompletely transposing Article 9 of that directive, the Kingdom of the Netherlands has failed to fulfil its obligations under that directive.

Costs

43 Under Article 69(2) of the Rules of Procedure, the unsuccessful party is to be ordered to pay the costs if they have been asked for in the successful party's pleadings. Under Article 69(3) thereof, the Court may order that costs be shared or that the parties are to bear their own costs if each party succeeds on some and fails on other heads. Since the Kingdom of the Netherlands has been unsuccessful in respect of three of the four grounds of complaint raised by the Commission, it must, in accordance with the form of order sought by the Commission, be ordered to bear three quarters of the Commission's costs. Since the Kingdom of the Netherlands made no request concerning costs, as to the remainder the parties are to bear their own costs.

On those grounds,

THE COURT (First Chamber)

hereby:

1. **Declares that, by incompletely transposing Article 6 of Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector, in that, first, Article 11(5)(1) of the Wet houdende regels inzake de telecommunicatie (Telecommunicatiewet) refers to a general administrative measure which was not communicated to the Commission of the European Communities and in that, second, the implementing provisions mentioned in Article 11(5)(3) of the Telecommunicatiewet were not communicated to the Commission, and by incompletely transposing Article 9 of that directive, the Kingdom of the Netherlands has failed to fulfil its obligations under that directive;**

2. **Dismisses the remainder of the action;**

3. **Orders the Kingdom of the Netherlands to bear, in addition to its own costs, three quarters of the Commission's costs;**

4. **As to the remainder of the action orders the Commission to bear its own costs.**

Jann La Pergola von Bahr

Silva de Lapuerta Lenaerts

Delivered in open court in Luxembourg on 24 June 2004.

R. Grass P. Jann

Registrar President of the Chamber

Case C-461/03

Gaston Schul Douane-expediteur BV

v

Minister van Landbouw, Natuur en Voedselkwaliteit

(Reference for a preliminary ruling from the College van Beroep voor het bedrijfsleven)

(Article 234 EC – Obligation on a national court to seek a preliminary ruling – Invalidity of a provision of Community law – Sugar – Additional import duty – Regulation (EC) No 1423/95 – Article 4)

Summary of the Judgment

1. *Preliminary rulings – Assessment of validity – Finding of invalidity of Community provisions comparable to those already declared invalid by the Court – Lack of jurisdiction of national courts – Duty to refer*

   (Art. 230 EC, Art. 234 EC, third para., and Art. 241 EC)

2. *Agriculture – Common organisation of the markets – Sugar – Trade with non-member countries – Additional import duties – Determination on the basis of the cif import price – Obligation on the importer to make an application – Determination on the basis of the representative price – Not valid*

   (Commission Regulation No 1423/95, Arts 1(2) and 4(1) and (2))

1. The third paragraph of Article 234 EC requires a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law to seek a ruling from the Court of Justice on a question relating to the validity of the provisions of a regulation even where the Court has already declared invalid analogous provisions of another comparable regulation. National courts have no jurisdiction themselves to determine that acts of Community institutions are invalid.

   Although the rule that national courts may not themselves determine that Community acts are invalid may have to be qualified in certain circumstances in the case of proceedings relating to an application for interim measures, the interpretation adopted in *Cilfit and Others*, referring to questions of interpretation, cannot be extended to questions relating to the validity of Community acts.

   That solution is imposed, first, by the requirement of uniformity in the application of Community law. That requirement is particularly vital where the validity of a Community act is in question. Differences between courts of the Member States as to the validity of Community acts would be liable to jeopardise the essential unity of the Community legal order and undermine the fundamental requirement of legal certainty.

   It is imposed, secondly, by the necessary coherence of the system of judicial protection instituted by the EC Treaty. References for a preliminary ruling on validity constitute, on the same basis as actions for annulment, a means of reviewing the legality of Community acts. By Articles 230 EC and 241 EC, on the one hand, and Article 234 EC, on the other, the Treaty established a complete system of legal remedies and procedures designed to ensure review of the legality of acts of the institutions and has entrusted such review to the Community Courts.

(see paras 17-19, 21-22, 25, operative part 1)

2. Paragraphs (1) and (2) of Article 4 of Regulation No 1423/95 laying down detailed implementing rules for the import of products in the sugar sector other than molasses are invalid inasmuch as they provide that the additional duty referred to therein is, as a general rule, established on the basis of the representative price referred to in Article 1(2) of that regulation and that that duty is established on the basis of the cif import price of the shipment concerned only if the importer so requests.

(see para. 32, operative part 2)

JUDGMENT OF THE COURT (Grand Chamber)

6 December 2005 (*)

(Article 234 EC – Obligation on a national court to seek a preliminary ruling – Invalidity of a provision of Community law – Sugar – Additional import duty – Regulation (EC) No 1423/95 – Article 4)

In Case C-461/03,

REFERENCE for a preliminary ruling under Article 234 EC from the College van Beroep voor het bedrijfsleven (Netherlands), made by decision of 24 October 2003, received at the Court on 4 November 2003, in the proceedings

Gaston Schul Douane-expediteur BV

v

Minister van Landbouw, Natuur en Voedselkwaliteit,

THE COURT (Grand Chamber),

composed of V. Skouris, President, P. Jann, C.W.A. Timmermans, A. Rosas and J. Malenovský, Presidents of Chambers, N. Colneric (Rapporteur), S. von Bahr, J.N. Cunha Rodrigues, R. Silva de Lapuerta, K. Lenaerts, G. Arestis, A. Borg Barthet and M. Ilešič, Judges,

Advocate General: D. Ruiz-Jarabo Colomer,

Registrar: R. Grass,

having regard to the written procedure,

after considering the observations submitted on behalf of:

– the Netherlands Government, by H.G. Sevenster and N.A.J. Bel, acting as Agents,

– the Commission of the European Communities, by T. van Rijn and M. van Beek, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 30 June 2005,

gives the following

Judgment

1 The reference for a preliminary ruling concerns the interpretation of Article 234 EC and the validity of Article 4(1) and (2) of Commission Regulation (EC) No 1423/95 of 23 June 1995 laying down detailed implementing rules for the import of products in the sugar sector other than molasses (OJ 1995 L 141, p. 16).

2 The reference was made in proceedings between Gaston Schul Douane-expediteur BV ('Gaston Schul') and the Minister van Landbouw, Natuur en Voedselkwaliteit ('the Minister for Agriculture') regarding the import of cane sugar.

Legal context

3 Pursuant to Article 234 EC:

'The Court of Justice shall have jurisdiction to give preliminary rulings concerning:

(a) the interpretation of this Treaty;

(b) the validity and interpretation of acts of the institutions of the Community and of the ECB;

(c) the interpretation of the statutes of bodies established by an act of the Council, where those statutes so provide.

Where such a question is raised before any court or tribunal of a Member State, that court or tribunal may, if it considers that a decision on the question is necessary to enable it to give judgment, request the Court of Justice to give a ruling thereon.

Where any such question is raised in a case pending before a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law, that court or tribunal shall bring the matter before the Court of Justice.'

4 The Agreement on Agriculture in Annex 1A to the Agreement establishing the World Trade Organisation ('the WTO') was approved on behalf of the Community by virtue of the first indent of Article 1(1) of Council Decision 94/800/EC of 22 December 1994 concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the agreements reached in the Uruguay Round multilateral negotiations (1986-1994) (OJ 1994 L 336, p. 1). Article 5 of the Agreement on Agriculture provides as follows:

'1. Notwithstanding the provisions of paragraph 1(b) of Article II of GATT 1994, any Member may take recourse to the provisions of paragraphs 4 and 5 below ... if:

(a) …

(b) the price at which imports of that product may enter the customs territory of the Member [of the WTO] granting the concession, as determined on the basis of the cif import price of the shipment concerned expressed in terms of its domestic currency, falls below a trigger price equal to the average 1986 to 1988 reference price for the product concerned.

…

5. The additional duty imposed under subparagraph 1(b) shall be set according to the following schedule:

…'

5 Article 15(3) of Council Regulation (EEC) No 1785/81 of 30 June 1981 on the common organisation of the markets in the sugar sector (OJ 1981 L 177, p. 4), as amended by Council Regulation (EC) No 3290/94 of 22 December 1994 on the adjustments and transitional arrangements required in the agriculture sector in order to implement the agreements concluded during the Uruguay Round of multilateral trade negotiations (OJ 1994 L 349, p. 105) ('the basic regulation') provides that 'the import prices to be taken into consideration for imposing an additional import duty shall be determined on the basis of the cif import prices of the consignment under consideration' and that 'cif import prices shall be checked to that end against the representative prices for the product on the world market or on the Community import market for that product'.

6 The Commission of the European Communities adopted Regulation (EC) No 1423/95 laying down detailed implementing rules for the basic regulation. Article 4 of Regulation No 1423/95 provides:

'1. In the absence of a request as referred to in paragraph 2 or where the cif import price of the consignment in question as referred to in paragraph 2 is less than the relevant representative price fixed by the Commission, the cif import price of the consignment in question to be taken into account for the imposition of an additional duty shall be the representative price referred to in Article 1(2) or (3).

2. When the cif price of the consignment in question is higher than the relevant representative price as referred to in Article 1(2) or (3), the importer may, on request made to the competent authority of the importing Member State at the time of acceptance of the import declaration, have applied for the purposes of establishing the additional duty either the cif import price of the consignment in question of white sugar or raw sugar converted into the standard quality as defined, respectively, in Article 1 of Regulation (EEC) No 793/72 and Article 1 of Regulation (EEC) No 431/68, or the equivalent price for the product falling within CN code 1702 90 99, as the case may be.

The cif import price of the consignment in question shall be converted into the price of sugar of the standard quality by adjustment pursuant to the relevant provisions of Article 5 of Regulation (EEC) No 784/68.

In such cases the cif import price of the consignment in question shall apply for the purposes of establishing the additional duty, provided that the interested party submits to the competent authorities of the importing Member State at least the following evidence:

– the contract of purchase or equivalent proof,

– the insurance contract,

– the invoice,

– the transport contract (where applicable),

– the certificate of origin,

– in the case of maritime transport, the bill of lading,

within thirty days of the date on which the import declaration was accepted.

The Member State in question may require any other information and documents in support of the request. As soon as the request has been lodged, the additional duty in question as fixed by the Commission shall apply.

However, the difference between the additional duty in question fixed by the Commission and the additional duty established on the basis of the cif import price of the consignment in question

shall give rise, at the request of the interested party, to the lodging by the latter of a security pursuant to Article 248 of Commission Regulation (EEC) No 2454/93.

The security shall be released as soon as the competent authority of the importing Member State accepts the request on the basis of the evidence supplied by the interested party.

The competent authority of the Member State shall refuse the request if it judges that the evidence supplied does not justify it.

If the authority does not accept the request, the security shall be forfeit.

…'

The main proceedings and the questions referred for a preliminary ruling

7 On 6 May 1998 Gaston Schul declared the import of 20 000 kg of raw cane sugar from Brazil at a cif price of NLG 31 916. According to the information sent by the customs authorities on 13 May 1998 with the comment 'check concluded without adjustments', the amount of the import duty due was NLG 20 983.70. On 4 August 1998 the inspector of the Tax Department of Roosendaal Customs District, on behalf of the Minister for Agriculture, requested payment from Gaston Schul of NLG 4 968.30 in respect of an 'agricultural levy'. This levy was calculated as follows: 20 000 kg multiplied by NLG 24.841182 (ECU 11.11) in respect of additional import duty per 100 kg. After making an unsuccessful claim against that notice of duty, Gaston Schul brought an action before the national court.

8 That court has noted, first, that Article 15 of the basic regulation, laying down the system for additional duty in the sugar sector, is identical to Article 5 of Regulation (EEC) No 2777/75 of the Council of 29 October 1975 on the common organisation of the market in poultrymeat (OJ 1975 L 282, p. 77), as amended by Regulation No 3290/94, those two provisions, in their current versions, having been adopted on the same date.

9 In the poultrymeat and egg sector, the Court, in its judgment in Case C-317/99 *Kloosterboer Rotterdam* [2001] ECR I-9863, declared invalid paragraphs (1) and (3) of Article 3 of Commission Regulation (EC) No 1484/95 of 28 June 1995 laying down detailed rules for implementing the system of additional import duties and fixing additional import duties in the poultrymeat and egg sectors and for egg albumin, and repealing Regulation No 163/67/EEC (OJ 1995 L 145, p. 47), inasmuch as they provide that the additional duty referred to therein is, as a general rule, established on the basis of the representative price laid down in Article 2(1) of that regulation and that the duty is established on the basis of the cif import price of the consignment concerned only if the importer so requests. According to that judgment, the Commission exceeded its executory powers.

10 The national court takes the view that paragraphs (1) and (3) of Article 3 of Regulation No 1484/95, which have been declared invalid by the Court of Justice as a result of these considerations, are identical in the respects considered by the Court of Justice to the provisions of Article 4(1) and (2) of Regulation No 1423/95. In both instances there is a basic regulation specifying, in accordance with Article 5 of the Agreement on Agriculture in Annex 1A to the Agreement establishing the WTO, that the additional import duty is calculated on the basis of the cif price, whereas in a Commission implementing regulation calculation of the additional duty on the basis of the representative price is made the general rule.

11 Paragraphs (1) and (2) of Article 4 of Regulation No 1423/95 are thus incompatible with Article 15 of the basic regulation.

12 On the basis of the Court's judgment in Case 314/85 *Foto-Frost* [1987] ECR 4199, the national court observes that it is for the Court of Justice alone to rule on the invalidity of acts of the Community institutions.

13 It considers, nevertheless, that the question whether the situation could be different in a national dispute such as that in the main proceedings, where the question posed concerns the validity of provisions corresponding to other provisions of Community law which the Court has already declared to be invalid in a preliminary ruling, such as the *Kloosterboer Rotterdam* judgment, requires an interpretation of the third paragraph of Article 234 EC.

14 Under those circumstances, the College van Beroep voor het bedrijfsleven decided to stay the proceedings and to refer the following questions to the Court for a preliminary ruling:

‘1. Is a court or tribunal as referred to in the third paragraph of Article 234 EC also required under that provision to submit to the Court of Justice a question such as that set out below concerning the validity of provisions of a regulation where the Court of Justice has ruled that analogous provisions of another, comparable regulation are invalid, or may it refrain from applying the first-mentioned provisions in view of the clear analogies between them and the provisions declared invalid?

2. Are paragraphs (1) and (2) of Article 4 of Regulation … No 1423/95 … invalid inasmuch as they provide that the additional duty referred to therein is, as a general rule, established on the basis of the representative price referred to in Article 1(2) of Regulation … No 1423/95 and that that duty is established on the basis of the cif import price of the shipment concerned only if the importer so requests?’

The questions

The first question

15 By the first question, the national court essentially asks whether the third paragraph of Article 234 EC requires a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law to seek a ruling from the Court of Justice on a question relating to the validity of the provisions of a regulation even where the Court has already declared invalid analogous provisions of another comparable regulation.

16 With regard to questions of interpretation, it is clear from the judgment in Case 283/81 *Cilfit and Others* [1982] ECR 3415, paragraph 21, that a court or tribunal against whose decisions there is no judicial remedy under national law is required, where a question of Community law is raised before it, to comply with its obligation to bring the matter before the Court of Justice, unless it has established that the question raised is irrelevant or that the Community provision in question has already been interpreted by the Court or that the correct application of Community law is so obvious as to leave no scope for any reasonable doubt (see also Case C-495/03 *Intermodal Transports* [2005] ECR I-0000, paragraph 33).

17 However, it is clear from paragraph 20 of the *Foto-Frost* judgment that national courts have no jurisdiction themselves to determine that acts of Community institutions are invalid.

18 The rule that national courts may not themselves determine that Community acts are invalid may have to be qualified in certain circumstances in the case of proceedings relating to an application for interim measures (*Foto-Frost*, paragraph 19; see also, to that effect, Case 107/76 *Hoffmann-La Roche* [1977] ECR 957, paragraph 6; Joined Cases 35/82 and 36/82 *Morson and Jhanjan* [1982] ECR 3723, paragraph 8; Joined Cases C-143/88 and C-92/89 *Zuckerfabrik Süderdithmarschen and Zuckerfabrik Soest* [1991] ECR I-415, paragraphs 21 and 33; and Case C-465/93 *Atlanta Fruchthandelsgesellschaft and Others (I)* [1995] ECR I-3761, paragraphs 30, 33 and 51).

19 Nevertheless, the interpretation adopted in the *Cilfit* judgment, referring to questions of interpretation, cannot be extended to questions relating to the validity of Community acts.

20 Firstly, even in cases which at first sight are similar, careful examination may show that a

provision whose validity is in question is not comparable to a provision which has already been declared invalid because, for instance, it has a different legal or factual context, as the case may be.

21 The main purpose of the jurisdiction conferred on the Court by Article 234 EC is to ensure that Community law is applied uniformly by national courts. That requirement of uniformity is particularly vital where the validity of a Community act is in question. Differences between courts of the Member States as to the validity of Community acts would be liable to jeopardise the essential unity of the Community legal order and undermine the fundamental requirement of legal certainty (*Foto-Frost*, paragraph 15).

22 The possibility of a national court ruling on the invalidity of a Community act is likewise incompatible with the necessary coherence of the system of judicial protection instituted by the EC Treaty. It is important to note in that regard that references for a preliminary ruling on validity constitute, on the same basis as actions for annulment, a means of reviewing the legality of Community acts. By Articles 230 EC and 241 EC, on the one hand, and Article 234 EC, on the other, the Treaty established a complete system of legal remedies and procedures designed to ensure review of the legality of acts of the institutions and has entrusted such review to the Community Courts (see Case 294/83 *Parti écologiste 'Les Verts'* v *Parliament* [1986] ECR 1339, paragraph 23; *Foto-Frost*, paragraph 16; and Case C-50/00 P *Unión de Pequeños Agricultores* [2002] ECR I-6677, paragraph 40).

23 Reducing the length of the proceedings cannot serve as justification for undermining the sole jurisdiction of the Community Courts to rule on the validity of Community law.

24 It must also be emphasised that the Community Courts are in the best position to rule on the validity of Community acts. Under Article 23 of the Statute of the Court of Justice, Community institutions whose acts are challenged are entitled to participate in the proceedings in order to defend the validity of the acts in question. Furthermore, under the second paragraph of Article 24 of that Statute, the Court may require Community institutions which are not participating in the proceedings to supply any information which it considers necessary for the purposes of the case before it (see *Foto-Frost*, paragraph 18).

25 It follows from all the foregoing considerations that the answer to the first question must be that the third paragraph of Article 234 EC requires a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law to seek a ruling from the Court of Justice on a question relating to the validity of the provisions of a regulation even where the Court has already declared invalid analogous provisions of another comparable regulation.

The second question

26 By the second question, the national court asks whether paragraphs (1) and (2) of Article 4 of Regulation No 1423/95 are invalid inasmuch as they provide that the additional duty referred to therein is, as a general rule, established on the basis of the representative price referred to in Article 1(2) of Regulation No 1423/95 and, moreover, that that duty is established on the basis of the cif import price of the shipment concerned only if the importer so requests.

27 It is clear from the wording of the first subparagraph of Article 15(3) of the basic regulation that only the cif import price of the consignment may serve as a basis for determining any additional duty.

28 No conditions or exceptions are attached to application of that rule.

29 The second subparagraph of Article 15(3) of the basic regulation provides unambiguously that the representative price for the product concerned is taken into account only for the purposes of checking the accuracy of the cif import price.

30 However, under Article 4(1) and (2) of Regulation No 1423/95, the cif import price may be taken

into consideration in establishing the additional duty on condition that the importer submits a formal request to that effect accompanied by certain supporting documents, and in all other cases the price taken into consideration must be the representative price, which is thus to be the general rule.

31 Inasmuch as Article 15(3) of the basic regulation makes no provision for an exception to the rule that additional duty is established on the basis of the cif import price, paragraphs (1) and (2) of Article 4 are contrary to that provision.

32 The answer to the second question must therefore be that paragraphs (1) and (2) of Article 4 of Regulation No 1423/95 are invalid inasmuch as they provide that the additional duty referred to therein is, as a general rule, established on the basis of the representative price referred to in Article 1(2) of Regulation No 1423/95 and that that duty is established on the basis of the cif import price of the shipment concerned only if the importer so requests.

Costs

33 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

1. **The third paragraph of Article 234 EC requires a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law to seek a ruling from the Court of Justice on a question relating to the validity of the provisions of a regulation even where the Court has already declared invalid analogous provisions of another comparable regulation;**

2. **Paragraphs (1) and (2) of Article 4 of Commission Regulation (EC) No 1423/95 of 23 June 1995 laying down detailed implementing rules for the import of products in the sugar sector other than molasses are invalid inasmuch as they provide that the additional duty referred to therein is, as a general rule, established on the basis of the representative price referred to in Article 1(2) of that regulation and that that duty is established on the basis of the cif import price of the shipment concerned only if the importer so requests.**

[Signatures]

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* Language of the case: Dutch.

Case C-53/03

Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others

v

GlaxoSmithKline plc

and

GlaxoSmithKline AEVE, formerly GlaxoWellcome AEVE

(Reference for a preliminary ruling from the Epitropi Antagonismou)

(Admissibility — Meaning of court or tribunal of a Member State — Abuse of a dominant position — Refusal to supply pharmaceutical products to wholesalers — Parallel trade)

Opinion of Advocate General Jacobs delivered on 28 October 2004

Judgment of the Court (Grand Chamber), 31 May 2005

Summary of the Judgment

Questions referred for a preliminary ruling — Reference to the Court — National court or tribunal for the purposes of Article 234 EC — Meaning — 'Epitropi Antagonismou' (Greek Competition Commission) — Excluded
(Art. 234 EC)

In order to determine whether a body making a reference is a court or tribunal for the purposes of Article 234 EC, which is a question governed by Community law alone, the Court takes account of a number of factors, such as whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is inter partes, whether it applies rules of law and whether it is independent. In addition, a body may refer a question to the Court only if there is a case pending before it and if it is called upon to give judgment in proceedings intended to lead to a decision of a judicial nature.

The Epitropi Antagonismou (Greek Competition Commission) does not satisfy those criteria. First of all, it is subject to the supervision of the Minister for Development, which implies that that minister is empowered, within certain limits, to review the lawfulness of its decisions. Next, even though its members enjoy personal and operational independence, there are no particular safeguards in respect of their dismissal or the termination of their appointment, which does not appear to constitute an effective safeguard against undue intervention or pressure from the executive on those members. In addition, its President is responsible for the coordination and general policy of its secretariat and is the supervisor of the personnel of that secretariat, with the result that, by virtue of the operational link between the Epitropi Antagonismou, a decision-making body, and its secretariat, a fact-finding body on the basis of whose proposal it adopts decisions, the Epitropi Antagonismou is not a clearly distinct third party in relation to the State body which, by virtue of its role, may be akin to a party in the course of competition proceedings. Finally, a competition authority such as the Epitropi Antagonismou is required to work in close cooperation with the Commission and may, pursuant to Article 11(6) of Regulation No 1/2003 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, be relieved of its competence by a decision of the Commission, with the consequence that the proceedings initiated before it will not lead to a decision of a judicial nature.

(see paras 29-37)

JUDGMENT OF THE COURT (Grand Chamber)

31 May 2005 (*)

(Admissibility – Meaning of court or tribunal of a Member State – Abuse of a dominant position – Refusal to supply pharmaceutical products to wholesalers – Parallel trade)

In Case C-53/03,

REFERENCE under Article 234 EC for a preliminary ruling, by the Epitropi Antagonismou (Greece), by decision of 22 January 2003, received at the Court on 5 February 2003, in the proceedings

Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others,

Panellinios syllogos farmakapothikarion,

Interfarm – A. Agelakos & Sia OE and Others,

K.P. Marinopoulos Anonymos Etairia emporias kai dianomis farmakeftikon proïonton and Others,

v

GlaxoSmithKline plc,

GlaxoSmithKline AEVE, formerly Glaxowellcome AEVE,

THE COURT (Grand Chamber),

composed of V. Skouris, President, P. Jann, C.W.A. Timmermans, A. Rosas and R. Silva de Lapuerta, Presidents of Chambers, C. Gulmann (Rapporteur), R. Schintgen, N. Colneric and S. von Bahr, Judges

Advocate General: F.G. Jacobs,

Registrar: L. Hewlett, Principal Administrator,

having regard to the written procedure and further to the hearing on 18 May 2004,

after considering the observations submitted on behalf of:

– Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others, by P. Kaponis and S. Orfanoudakis, dikigoroi,

– Panellinios syllogos farmakapothikarion and K.P. Marinopoulos Anonymos Etairia emporias kai dianomis farmakeftikon proïonton and Others, by L. Roumanias and G. Papaïoannou, dikigoroi, and W. Rehmann, Rechtsanwalt,

– Farmakeftikos Syndesmos Anonymi Emporiki Etairia, by D. Chatzinikolis, dikigoros,

– Interfarm A. Agelakos & Sia OE and Others, by G. Mastorakos, dikigoros,

– GlaxoSmithKline plc and GlaxoSmithKline AEVE, by D. Kyriakis, dikigoros, I. Forrester QC and A. Schulz, Rechtsanwalt,

– the Swedish Government, by A. Kruse, acting as Agent,

– the Commission of the European Communities, by T. Christoforou and F. Castillo de la Torre, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 28 October 2004,

gives the following

Judgment

1 This request for a preliminary ruling concerns the interpretation of Article 82 EC.

2 The request was made in proceedings before the Epitropi Antagonismou (the Greek Competition Commission), between the complainants, Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others ('Syfait and Others'), Panellinios syllogos farmakapothikarion ('PSF'), Interfarm – A. Agelakos & Sia OE and Others ('Interfarm and Others') and K.P. Marinopoulos Anonymos Etairia emporias kai dianomis farmakeftikon proïonton and Others ('Marinopoulos and Others'), and GlaxoSmithKline plc ('GSK plc'), a United Kingdom company, and its subsidiary incorporated under Greek law, GlaxoSmithKline AEVE, formerly Glaxowellcome AEVE ('GSK AEVE'), concerning the latter two companies' refusal to meet orders for certain pharmaceutical products on the Greek market.

Law

Community law

3 Article 82 EC provides:

'Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States.

Such abuse may, in particular, consist in:

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

(b) limiting production, markets or technical development to the prejudice of consumers;

(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.'

National law

4 Article 2 of Law No 703/1977 on the control of monopolies and oligopolies and the protection of free competition (FEK (Official Gazette) A' 278), as amended by Law No 2941/2001 (FEK A' 201, hereafter 'Law No 703/1977'), essentially corresponds to Article 82 EC.

The dispute in the main proceedings and the questions referred for a preliminary ruling

5 Syfait and Others are associations of pharmacists established in Greece whose main activity is the operation of a joint wholesale repository for pharmaceutical products, which they purchase from various pharmaceutical companies in order to ensure the supply of their members.

6 PSF is an association of wholesalers of pharmaceutical products established in Greece, which defends the interests of its members.

7 Interfarm and Others are wholesalers of pharmaceutical products established in Greece. Marinopoulos and Others are distributors of pharmaceutical products operating in Greece.

8 GSK AEVE is established in Greece and is wholly owned by GSK plc, a manufacturer of pharmaceutical products established in the United Kingdom resulting from the merger in 2000 of Glaxowellcome plc and SmithKline Beecham.

9 GSK AEVE imports and distributes numerous proprietary medicinal products including Imigran, Lamictal and Serevent. Those are newly created medicines resulting from research and technology and are classified as prescription medicines.

10 The members of Syfait and Others, and of PSF, and Interfarm and Others and Marinopoulos and Others buy those medicines, amongst others, in all forms from GSK AEVE and then distribute them on the national market and abroad.

11 Until November 2000, GSK AEVE met all orders which it received. A large proportion of the supplies corresponding to those orders was re-exported to other Member States, especially to the United Kingdom because of the much lower price of Imigran, Lamictal and Serevent in Greece.

12 From early November 2000, invoking significant shortages on the Greek market, which it attributed to re-exports by third parties, GSK AEVE changed its system of distribution in Greece and stopped meeting the orders of the complainants in the main proceedings and of third parties, stating that it would supply hospitals and pharmacies directly.

13 In February 2001, considering that the supply of medicinal products had to some extent been normalised, and that the stocks of hospitals and pharmacies had been rebuilt, GSK AEVE replaced the previous sales system with another system of distribution.

14 The complainants in the main proceedings brought before the Epitropi Antagonismou the question of GSK AEVE's marketing of Imigran, Lamictal and Serevent on the Greek market under successive systems of distribution since November 2000. They alleged that that company had not met in full the orders it had received and that such conduct is an abuse of a dominant position within the meaning of Article 2 of Law No 703/1977 and Article 82 EC.

15 By Decision No 193/111 of 3 August 2001 ordering interim measures, the Epitropi Antagonismou temporarily required GSK AEVE, pending adoption of the decision in the main proceedings, to meet the orders for the three medicinal products in question. GSK AEVE applied to the Diikitiko Efetio Athinon (Administrative Appeal Court, Athens) for an order suspending that decision, but it was confirmed on 10 January 2002 and was still in force at the date of the referring decision.

16 The Epitropi Antagonismou states that GSK AEVE complied with the interim measures prescribed by Decision No 193/111 at least to the extent that that company was supplied by GSK plc. That supply exceeded the consumption needs of the domestic market. The evidence provided to the Epitropi Antagonismou by GSK AEVE shows, however, that orders were considerably higher than that level, in particular in September 2001, so that not all orders could be met.

17 In the referring decision, the Epitropi Antagonismou states that GSK AEVE and GSK plc comply with the circular adopted on 27 November 2001 by the Ethnikos Organismos Farmakon (National Organisation for Medicines), which provides that all participants in the distribution of prescribed medicines 'must supply to the domestic market quantities at least equal to current prescription levels … plus an amount (25%) to cover any emergencies and changes of circumstance'.

18 Furthermore, on 5 December 2001, GSK AEVE applied to the Epitropi Antagonismou for negative clearance under Article 11 of Law No 703/1977 in respect of its refusal to cover more than 125% of Greek demand.

19 Faced simultaneously with that application by GSK AEVE for negative clearance and the complaints from Syfait and Others, PSF, Interfarm and Others and Marinopoulos and Others against GSK AEVE and GSK plc, the Epitropi Antagonismou asks to what extent the refusal by the latter two companies to meet in full the orders placed by the complainants constitutes an abuse of a dominant position within the meaning of Article 82 EC. If it is not an abuse, the Epitropi Antagonismou states that it will be in a position to consider whether the conditions for the grant of the negative clearance sought by GSK AEVE are satisfied.

20 In those circumstances, the Epitropi Antagonismou decided to stay the proceedings and to refer the following questions to the Court for a preliminary ruling:

'1. Where the refusal of an undertaking holding a dominant position to meet fully the orders sent to it by pharmaceutical wholesalers is due to its intention to limit their export activity and, thereby, the harm caused to it by parallel trade, does the refusal constitute per se an abuse within the meaning of Article 82 EC? Is the answer to that question affected by the fact that the parallel trade is particularly profitable for the wholesalers because of the different prices, resulting from State intervention, in the Member States of the European Union, that is to say by the fact that pure conditions of competition do not prevail in the pharmaceuticals market, but a regime which is governed to a large extent by State intervention? Is it ultimately the duty of a national competition authority to apply Community competition rules in the same way to markets which function competitively and those in which competition is distorted by State intervention?

2. If the Court holds that limitation of parallel trade, for the reasons set out above, does not constitute an abusive practice in every case where it is engaged in by an undertaking holding a dominant position, how is possible abuse to be assessed?

In particular:

(a) Do the percentage by which normal domestic consumption is exceeded and/or the loss suffered by an undertaking holding a dominant position compared with its total turnover and total profits constitute appropriate criteria? If so, how are the level of that percentage and the level of that loss determined (the latter as a percentage of turnover and total profits), above which the conduct in question may be abusive?

(b) Is an approach entailing the balancing of interests appropriate, and, if so, what are the interests to be compared?

In particular:

(i) is the answer affected by the fact that the ultimate consumer/patient derives limited financial advantage from the parallel trade? and

(ii) is account to be taken, and to what extent, of the interests of social insurance bodies in cheaper medicinal products?

(c) What other criteria and approaches are considered appropriate in the present

case?'

The jurisdiction of the Court

21 As a preliminary point, it is necessary to ascertain whether the Epitropi Antagonismou is a court or tribunal within the meaning of Article 234 EC and whether the Court therefore has jurisdiction to make a ruling on the questions referred to it.

The national law governing the Epitropi Antagonismou

22 Article 8(1) of Law No 703/1977 provides:

'An Epitropi Antagonismou shall be established which shall operate as an independent authority. Its members shall enjoy personal and operational independence and shall be bound in the exercise of their duties only by the law and their conscience. The Epitropi Antagonismou shall be administratively and economically autonomous subject to the supervision of the Ministry for … [Development].'

23 The Epitropi Antagonismou has nine members appointed pursuant to Article 8(3) of Law No 703/1977. Four members and their deputies are chosen by the minister from lists of three persons which are submitted by each of four professional bodies. The other members include a member of the government legal service or a judge of the highest rank, two academics, one a lawyer and the other an economist, and two persons of acknowledged repute with experience of economic law and competition policy. According to Article 8(5) of Law No 703/1977, the members of the Epitropi Antagonismou and their deputies are appointed by the Minister for Development for a term of three years.

24 Article 8(6) of the same law provides:

'The president of the Epitropi Antagonismou and his deputy shall be appointed by the Minister [for Development] from amongst the members of the [Epitropi Antagonismou]… The president of the Epitropi Antagonismou shall be a member of the national civil service and shall exclusively perform that task for the duration of his term of office …'

25 Article 8(7) of Law No 703/1977 provides:

'During their term of office, the President and the members shall not carry on, whether for remuneration or otherwise, any other public function or professional activity, whether or not in-house, which is incompatible with the role and duties of a member of the Epitropi Antagonismou.'

26 As regards relations between the Epitropi Antagonismou and its secretariat, Article 8C(1)(b) of the same law provides:

'The President shall coordinate and direct the secretariat of the [Epitropi Antagonismou].'

27 Article 8C(1)(d) of the same law provides:

'The President is the immediate superior of the personnel of the secretariat of the Epitropi Antagonismou and shall exercise disciplinary power over them.'

28 According to Article 8C(3), the President of the Epitropi Antagonismou may authorise the Director General or the directors of the secretariat of the Epitropi Antagonismou to exercise some of his powers. The Director General is to be appointed for three years, and the appointment is renewable by decision of the Minister for Development subject to the assent of the Epitropi Antagonismou, as laid down by the second sentence of Article 8D(1) of Law No 703/1977.

Findings of the Court

29 According to settled case-law, in order to determine whether a body making a reference is a court or tribunal for the purposes of Article 234 EC, which is a question governed by Community law alone, the Court takes account of a number of factors, such as whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is inter partes, whether it applies rules of law and whether it is independent (see, in particular, Case C-54/96 *Dorsch Consult* [1997] ECR I-4961, paragraph 23, Joined Cases C-110/98 to C-147/98 *Gabalfrisa and Others* [2000] ECR I-1577, paragraph 33, Case C-195/98 *Österreichischer Gewerkschaftsbund* [2000] ECR I-10497, paragraph 24, and Case C-516/99 *Schmid* [2002] ECR I-4573, paragraph 34). Moreover, a national court may refer a question to the Court only if there is a case pending before it and if it is called upon to give judgment in proceedings intended to lead to a decision of a judicial nature (see, in particular, Case C-134/97 *Victoria Film* [1998] ECR I-7023, paragraph 14, and *Österreichischer Gewerkschaftsbund*, paragraph 25).

30 It should be noted, first of all, in this regard that the Epitropi Antagonismou is subject to the supervision of the Minister for Development. Such supervision implies that that minister is empowered, within certain limits, to review the lawfulness of the decisions adopted by the Epitropi Antagonismou.

31 Next, whilst it is true that the members of the Epitropi Antagonismou enjoy personal and operational independence and are bound in the exercise of their duties only by the law and their conscience within the meaning of Law No 703/1977, it nevertheless remains that there are no particular safeguards in respect of their dismissal or the termination of their appointment. That system does not appear to constitute an effective safeguard against undue intervention or pressure from the executive on the members of the Epitropi Antagonismou (see, to that effect, Case C-103/97 *Köllensperger and Atzwanger* [1999] ECR I-551, paragraph 21).

32 It should also be noted that under Article 8C(1)(b) and (d) of Law No 703/1977, the President of the Epitropi Antagonismou is responsible for the coordination and general policy of the secretariat, is the immediate superior of the personnel of that secretariat and exercises disciplinary power over them.

33 It should be noted in this regard that the Tribunales Económico-Administrativos (Economic and Administrative Courts) (Spain) were found by the Court, in paragraphs 39 and 40 of the *Gabalfrisa* judgment, to be third parties in relation to the departments of the tax authority responsible for the management, clearance and recovery of VAT, particularly given the separation of functions between them. However, in so far as there is an operational link between the Epitropi Antagonismou, a decision-making body, and its secretariat, a fact-finding body on the basis of whose proposal it adopts decisions, the Epitropi Antagonismou is not a clearly distinct third party in relation to the State body which, by virtue of its role, may be akin to a party in the course of competition proceedings.

34 Lastly, it should be noted that a competition authority such as the Epitropi Antagonismou is required to work in close cooperation with the Commission of the European Communities and may, pursuant to Article 11(6) of Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty (OJ 2003 L 1, p. 1), be relieved of its competence by a decision of the Commission. It should moreover be noted in this context that Article 11(6) of Regulation No 1/2003 essentially maintains the rule in Article 9(3) of Council Regulation No 17 of 6 February 1962, First Regulation implementing Articles [81] and [82] of the Treaty (OJ, English Special Edition, 1959-1962 p. 87), that the competition authorities of the Member States are automatically relieved of their competence where the Commission initiates its own proceedings (see in that connection the 17th recital in the preamble to Regulation No 1/2003).

35 A body may refer a question to the Court only if there is a case pending before it and if it is called upon to give judgment in proceedings intended to lead to a decision of a judicial nature

(see *Victoria Film*, paragraph 14, and *Österreichischer Gewerkschaftsbund*, paragraph 25).

36 Whenever the Commission relieves a national competition authority such as the Epitropi Antagonismou of its competence, the proceedings initiated before that authority will not lead to a decision of a judicial nature.

37 It follows from the factors examined, considered as a whole, that the Epitropi Antagonismou is not a court or tribunal within the meaning of Article 234 EC.

38 Accordingly, the Court has no jurisdiction to answer the questions referred by the Epitropi Antagonismou.

Costs

39 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the Epitropi Antagonismou, the decision on costs is a matter for that body. The costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

The Court of Justice of the European Communities has no jurisdiction to answer the questions referred by the Epitropi Antagonismou by decision of 22 January 2003.

[Signatures]

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* Language of the case: Greek.

JUDGMENT OF THE COURT (Grand Chamber)

12 July 2005 (*)

(Failure of a Member State to fulfil obligations – Fisheries – Control obligations placed on the Member States – Judgment of the Court establishing a breach of obligations – Non-compliance – Article 228 EC – Payment of a lump sum – Imposition of a penalty payment)

In Case C-304/02,

ACTION under Article 228 EC for failure to fulfil obligations, brought on 27 August 2002,

Commission of the European Communities, represented by M. Nolin, H. van Lier and T. van Rijn, acting as Agents, with an address for service in Luxembourg,

applicant,

v

French Republic, represented by G. de Bergues and A. Colomb, acting as Agents,

defendant,

THE COURT (Grand Chamber),

composed of V. Skouris, President, P. Jann (Rapporteur) and C.W.A. Timmermans, Presidents of Chambers, C. Gulmann, J.-P. Puissochet, R. Schintgen, N. Colneric, S. von Bahr and J.N. Cunha Rodrigues, Judges,

Advocate General: L.A. Geelhoed,

Registrar: M. Múgica Arzamendi, Principal Administrator, subsequently M.-F. Contet, Principal Administrator, and H. von Holstein, Deputy Registrar,

having regard to the written procedure and further to the hearing on 3 March 2004,

after hearing the Opinion of the Advocate General at the sitting on 29 April 2004,

having regard to the order of 16 June 2004 reopening the oral procedure and further to the hearing on 5 October 2004,

after hearing the oral observations of:

– the Commission, represented by G. Marenco, C. Ladenburger and T. van Rijn, acting as Agents,

– the French Republic, represented by R. Abraham, G. de Bergues and A. Colomb, acting as Agents,

– the Kingdom of Belgium, represented by J. Devadder, acting as Agent,

– the Czech Republic, represented by T. Boček, acting as Agent,

– the Kingdom of Denmark, represented by A.R. Jacobsen and J. Molde, acting as Agents,

– the Federal Republic of Germany, represented by W.D. Plessing, acting as Agent,

– the Hellenic Republic, represented by A. Samoni and E.M. Mamouna, acting as Agents,

– the Kingdom of Spain, represented by N. Diaz Abad, acting as Agent,

– Ireland, represented by D. O'Donnell and P. Mc Cann, acting as Agents,

– the Italian Republic, represented by I.M. Braguglia, acting as Agent,

– the Republic of Cyprus, represented by D. Lissandrou and E. Papageorgiou, acting as Agents,

– the Republic of Hungary, represented by R. Somssich and A. Muller, acting as Agents,

– the Kingdom of the Netherlands, represented by J. van Bakel, acting as Agent,

– the Republic of Austria, represented by E. Riedl, Rechtsanwalt,

– the Republic of Poland, represented by T. Nowakowski, acting as Agent,

– the Portuguese Republic, represented by L. Fernandes, acting as Agent,

– the Republic of Finland, represented by T. Pynnä, acting as Agent,

– the United Kingdom of Great Britain and Northern Ireland, represented by D. Anderson QC,

after hearing the Opinion of the Advocate General at the sitting on 18 November 2004,

gives the following

Judgment

1 By its application, the Commission of the European Communities requests the Court to:

– declare that, by failing to take the necessary measures to comply with the judgment of 11 June 1991 in Case C-64/88 *Commission* v *France* [1991] ECR I-2727, the French Republic has failed to fulfil its obligations under Article 228 EC;

– order the French Republic to pay to the Commission, into the account 'European Community own resources', a penalty payment in the sum of EUR 316 500 for each day of delay in implementing the measures necessary to comply with the judgment in Case C-64/88 *Commission* v *France*, cited above, from delivery of the present judgment until the judgment in Case C-64/88 *Commission* v *France* has been complied with;

– order the French Republic to pay the costs.

Community legislation

Rules regarding controls

2 The Council has established certain control measures for fishing activities by vessels of the Member States. Those measures have been successively set out in Council Regulation (EEC) No 2057/82 of 29 June 1982 establishing certain control measures for fishing activities by vessels of the Member States (OJ 1982 L 220, p. 1), in Council Regulation (EEC) No 2241/87 of

23 July 1987 establishing certain control measures for fishing activities (OJ 1987 L 207, p. 1) which repealed and replaced Regulation No 2057/82, and in Council Regulation (EEC) No 2847/93 of 12 October 1993 establishing a control system applicable to the common fisheries policy (OJ 1993 L 261, p. 1) which repealed and replaced Regulation No 2241/87 on 1 January 1994.

3 The control measures set out in those regulations are essentially identical.

4 Article 1(1) and (2) of Regulation No 2847/93 provides:

‘1. In order to ensure compliance with the rules of the common fisheries policy, a Community system is hereby established including in particular provisions for the technical monitoring of:

– conservation and resource management measures,

– structural measures,

– [measures] concerning the common organisation of the market,

as well as certain provisions relating to the effectiveness of sanctions to be applied in cases where the abovementioned measures are not observed.

2. To this end, each Member State shall adopt, in accordance with Community rules, appropriate measures to ensure the effectiveness of the system. It shall place sufficient means at the disposal of its competent authorities to enable them to perform their tasks of inspection and control as laid down in this Regulation.’

5 Article 2(1) of Regulation No 2847/93 states:

‘In order to ensure compliance with all the rules in force concerning conservation and control measures, each Member State shall, within its territory and within maritime waters subject to its sovereignty or jurisdiction, monitor fishing activity and related activities. It shall inspect fishing vessels and investigate all activities thus enabling verification of the implementation of this Regulation, including the activities of landing, selling, transporting and storing fish and recording landings and sales.’

6 Article 31(1) and (2) of Regulation No 2847/93 provides:

‘1. Member States shall ensure that the appropriate measures be taken, including of administrative action or criminal proceedings in conformity with their national law, against the natural or legal persons responsible where common fisheries policy have [sic] not been respected, in particular following a monitoring or inspection carried out pursuant to this Regulation.

2. The proceedings initiated pursuant to paragraph 1 shall be capable, in accordance with the relevant provisions of national law, of effectively depriving those responsible of the economic benefit of the infringements or of producing results proportionate to the seriousness of such infringements, effectively discouraging further offences of the same kind.’

Technical rules

7 The technical measures for the conservation of fishery resources which are envisaged by the rules regarding controls have been set out inter alia in Council Regulation (EEC) No 171/83 of 25 January 1983 (OJ 1983 L 24, p. 14), repealed and replaced by Council Regulation (EEC) No 3094/86 of 7 October 1986 (OJ 1986 L 288, p. 1), itself repealed and replaced with effect from 1 July 1997 by Council Regulation (EC) No 894/97 of 29 April 1997 (OJ 1997 L 132, p. 1), in turn partially repealed and replaced with effect from 1 January 2000 by Council Regulation (EC) No 850/98 of 30 March 1998 for the conservation of fishery resources through technical measures

for the protection of juveniles of marine organisms (OJ 1998 L 125, p. 1).

8 The technical measures laid down by those regulations are essentially identical.

9 The measures concern, inter alia, the minimum mesh size for nets, the prohibition on attaching to nets certain devices by means of which the mesh is obstructed or diminished, and the prohibition on offering for sale fish of less than the minimum size ('undersized fish') except for catches representing only a limited percentage of the overall catch ('by-catches').

The judgment in Case C-64/88 *Commission* v *France*

10 In the judgment in Case C-64/88 *Commission* v *France*, the Court declared:

'by failing to carry out between 1984 and 1987 controls ensuring compliance with technical Community measures for the conservation of fishery resources, laid down by [Regulation No 171/83] and by [Regulation No 3094/86], the French Republic has failed to fulfil its obligations under Article 1 of [Regulation No 2057/82] and under Article 1 of [Regulation No 2241/87]'.

11 In that judgment, the Court upheld five complaints against the French Republic:

– inadequate controls in relation to the minimum mesh size for nets (paragraphs 12 to 15 of the judgment);

– inadequate controls in relation to the attachment to nets of devices prohibited by the Community rules (paragraphs 16 and 17 of the judgment);

– failure to fulfil control obligations in relation to by-catches (paragraphs 18 and 19 of the judgment);

– failure to fulfil control obligations so far as concerns compliance with the technical measures of conservation prohibiting the sale of undersized fish (paragraphs 20 to 23 of the judgment);

– failure to fulfil the obligation to take action in respect of infringements (paragraph 24 of the judgment).

Pre-litigation procedure

12 By letter of 8 November 1991, the Commission requested the French authorities to inform it of the measures taken to comply with the judgment in Case C-64/88 *Commission* v *France*. On 22 January 1992 the French authorities replied that they '[intended] to do their utmost to comply with the [Community] provisions'.

13 In the course of a number of visits to French ports the Commission inspectors found that the situation had improved, but noted that the French authorities' controls were inadequate in several respects.

14 After requesting the French Republic to submit its observations, on 17 April 1996 the Commission issued a reasoned opinion in which it stated that the judgment in Case C-64/88 *Commission* v *France* had not been complied with in the following respects:

– failure to comply with the Community rules in the measuring of the minimum mesh size of nets;

– inadequate controls, enabling undersized fish to be offered for sale;

– laxness on the part of the French authorities in taking action in respect of infringements.

15 Pointing out that financial penalties could be imposed for failure to comply with a judgment of the Court, the Commission set a time-limit of two months for the French Republic to take all the measures necessary in order to comply with the judgment in Case C-64/88 *Commission* v *France*.

16 In the course of an exchange of correspondence between the French authorities and Commission staff, the former kept the Commission informed of the measures that it had taken and was continuing to implement to strengthen controls.

17 At the same time, inspection visits were made to French ports. On the basis of reports drawn up after visiting Lorient, Guilvinec and Concarneau from 24 to 28 August 1996, Guilvinec, Concarneau and Lorient from 22 to 26 September 1997, Marennes-Oléron, Arcachon and Bayonne from 13 to 17 October 1997, south Brittany and Aquitaine from 30 March to 4 April 1998, Douarnenez and Lorient from 15 to 19 March 1999 and Lorient, Bénodet, Loctudy, Guilvinec, Lesconil and Saint-Guénolé from 13 to 23 July 1999, the Commission staff reached the conclusion that two problems remained, namely inadequate controls enabling undersized fish to be offered for sale and the laxness on the part of the French authorities in taking action in respect of infringements.

18 The inspectors' reports prompted the Commission to issue a supplementary reasoned opinion on 6 June 2000, in which it stated that the judgment in Case C-64/88 *Commission* v *France* had not been complied with as regards the two matters mentioned above. The Commission indicated that, in this context, it regarded as 'particularly serious the fact that public documents relating to sales by auction officially use the code "00" in clear breach of Council Regulation (EC) No 2406/96 of 26 November 1996 laying down common marketing standards for certain fishery products' (OJ 1996 L 334, p. 1). It pointed out that financial penalties could be imposed.

19 In their response of 1 August 2000, the French authorities essentially contended that since the last inspection report national fisheries control had undergone significant change. An internal reorganisation had taken place, with the establishment of a fisheries control 'unit', which subsequently became a fisheries control 'task force', and the means of control had been strengthened, including the provision of patrol boats and of a system for the on-screen surveillance of vessels' positions and the circulation of instructions for the use of control staff.

20 On an inspection visit from 18 to 28 June 2001 to the communes Guilvinec, Lesconil, Saint-Guénolé and Loctudy, the Commission's inspectors recorded poor controls, the presence of undersized fish and the offering for sale of those fish under the code '00'.

21 By letter of 16 October 2001, the French authorities sent to the Commission a copy of an instruction addressed to the regional and departmental maritime directorates, enjoining them to put an end to use of the code '00' by 31 December 2001 and to apply from that date the statutory penalties to economic operators not complying with the instruction. The French authorities referred to an increase since 1998 in the number of proceedings for infringement of the rules on minimum sizes and to the deterrent effect of the penalties imposed. They also informed the Commission of the adoption in 2001 of a general fisheries control plan, which laid down priorities, including implementation of a hake recovery plan and strict control of compliance with minimum sizes.

22 Taking the view that the French Republic still had not complied with the judgment in Case C-64/88 *Commission* v *France*, the Commission brought the present action.

Procedure before the Court

23 In answer to a question asked by the Court with a view to the hearing on 3 March 2004, the Commission informed the Court that, since the present action was brought, its staff had made

three further inspection visits (from 11 to 16 May 2003 to Sète and Port-Vendres, from 19 to 20 June 2003 to Loctudy, Lesconil, Saint-Guénolé and Guilvinec, and from 14 to 22 July 2003 to Port-la-Nouvelle, Sète, Le Grau-du-Roi, Carro, Sanary-sur-Mer and Toulon). According to the Commission, it is apparent from the mission reports on those visits that the number of cases of undersized fish being offered for sale had decreased in Brittany but problems remained on the Mediterranean coast with regard to bluefin tuna, and that inspections on landing were infrequent.

24 The Commission explained that, in order to assess the effectiveness of the measures taken by the French authorities, it would need to have the reports and sets of statistics relating to implementation of the various measures for the general organisation of fisheries control to which the French Government had referred.

25 After being requested by the Court to indicate the number of inspections at sea and on land which the French authorities had carried out since the bringing of the present action with a view to ensuring compliance with the rules relating to the minimum size of fish, the number of infringements recorded and the action taken by the courts in respect of those infringements, on 30 January 2004 the French Government lodged fresh statistics. They show that the number of inspections, findings of infringement and convictions was lower in 2003 than in 2002.

26 The French Government stated that the decrease in inspections at sea was due to the mobilisation of French vessels to fight the pollution caused by the shipwrecking of the oil tanker *Prestige* and that inspections on land had decreased because the discipline of fishermen had improved. It explained that the decrease in the number of convictions was due to the effects of Law No 2002-1062 of 6 August 2002 granting an amnesty (JORF No 185 of 9 August 2002, p. 13647), while pointing out that the average amount of the fines imposed had increased.

The breach of obligations alleged

The geographical area at issue

27 It should be noted as a preliminary point that the declaration made in the operative part of the judgment in Case C-64/88 *Commission* v *France* that the French Republic had failed to carry out controls ensuring compliance with technical Community measures for the conservation of fishery resources, laid down by Regulations Nos 171/83 and 3094/86, only concerned, as is apparent from the delimitation set out in Article 1(1) of those regulations, the taking and landing of fishery resources occurring in certain areas of the north-east Atlantic.

28 As submitted by the French Government and explained by the Commission at the hearing on 3 March 2004, the present action thus relates only to the situation in those areas.

The reference date

29 The Commission sent the first reasoned opinion to the French Republic on 14 April 1996 and, subsequently, a supplementary reasoned opinion on 6 June 2000.

30 It follows that the reference date for assessing the alleged breach of obligations is the date upon which the period laid down in the supplementary reasoned opinion of 6 June 2000 expired, that is to say two months after notification of that opinion (Case C-474/99 *Commission* v *Spain* [2002] ECR I-5293, paragraph 27, and Case C-33/01 *Commission* v *Greece* [2002] ECR I-5447, paragraph 13).

31 Since the Commission has claimed that the Court should impose a penalty payment on the French Republic, it should also be ascertained whether the alleged breach of obligations has continued up to the Court's examination of the facts.

The extent of the obligations on the Member States under the common fisheries policy

32 Article 1 of Regulation No 2847/93, which constitutes a specific embodiment, in the field of fisheries, of the obligations imposed on the Member States by Article 10 EC, provides that the Member States are to adopt appropriate measures to ensure the effectiveness of the Community system for conservation and management of fishery resources.

33 Regulation No 2847/93 imposes in this regard a joint responsibility on Member States (see, in relation to Regulation No 2241/87, Case C-9/89 *Commission* v *Spain* [1990] ECR I-1383, paragraph 10). This joint responsibility means that when a Member State fails to fulfil its obligations, it prejudices the interests of the other Member States and of their economic operators.

34 It is imperative that the Member States fulfil the obligations incumbent on them under the Community rules in order to ensure the protection of fishing grounds, the conservation of the biological resources of the sea and their exploitation on a sustainable basis in appropriate economic and social conditions (see, in relation to failure to comply with the quota system for the fishing years 1991 to 1996, Joined Cases C-418/00 and C-419/00 *Commission* v *France* [2002] ECR I-3969, paragraph 57).

35 To this end, Article 2 of Regulation No 2847/93, which repeats the obligations laid down by Article 1(1) of Regulation No 2241/87, obliges the Member States to monitor fishing activity and related activities. It requires them to inspect fishing vessels and investigate all activities, including the activities of landing, selling, transporting and storing fish and recording landings and sales.

36 Article 31 of Regulation No 2847/93, which takes up the obligations laid down in Article 1(2) of Regulations Nos 2057/82 and 2241/87, requires the Member States to take action in respect of recorded infringements. It states that the proceedings initiated must be capable of effectively depriving those responsible of the economic benefit of the infringements or of producing results proportionate to the seriousness of such infringements, effectively discouraging further offences of the same kind.

37 Regulation No 2847/93 thus provides specific indications as to the content of the measures which must be taken by the Member States and which must seek to ensure that fishery operations are conducted properly with the objective of both preventing any breaches and punishing such breaches. That objective means that the measures implemented must be effective, proportionate and a deterrent. As the Advocate General has observed in point 39 of his Opinion of 29 April 2004, there must be a serious risk, for persons engaging in fishing activity and related activities, that in the event of infringement of the rules of the common fisheries policy, they will be detected and have sufficiently severe penalties imposed on them.

38 It is in light of those considerations that the question whether the French Republic has taken all the necessary measures to comply with the judgment in Case C-64/88 *Commission* v *France* should be examined.

The first complaint: inadequate controls

Arguments of the parties

39 The Commission maintains that it is clear from the findings made by its inspectors that the French authorities' controls regarding compliance with the Community provisions on the minimum size of fish are still deficient.

40 The increase in the number of inspections to which the French Government refers cannot modify those findings since only inspections at sea are involved. The control plans adopted by the French Government in 2001 and 2002 are not, in themselves, capable of bringing the alleged breach of obligations to an end. Implementation of those plans involves the prior setting of objectives, which are necessary in order to be able to assess the effectiveness and operability of the plans. Moreover, the plans must actually be implemented, which the visits

made to French ports since the plans were established have not demonstrated.

41 The French Government observes, first of all, that the inspection reports upon which the Commission relies were never made known to the French authorities, which were not in a position to respond to the statements that they contain. Furthermore, those reports are founded on mere suppositions.

42 It also submits that since delivery of the judgment in Case C-64/88 *Commission* v *France* it has been constantly strengthening its control mechanisms. This strengthening has taken the form of an increase in the number of inspections at sea and the adoption, in 2001, of a general control plan, supplemented, in 2002, by a 'minimum catch sizes' control plan. With regard to the effectiveness of those measures, it points out that it has been possible to record no marketing of undersized fish on several inspection visits made by Commission inspectors.

43 Finally, in the French Government's submission, the Commission merely asserts that the measures taken by it are inappropriate without indicating the measures capable of bringing the alleged breach of obligations to an end.

Findings of the Court

44 Like the procedure laid down in Article 226 EC (see, in relation to failure to comply with the quota system for the fishing years 1988 and 1990, Case C-333/99 *Commission* v *France* [2001] ECR I-1025, paragraph 33), the procedure laid down in Article 228 EC is based on the objective finding that a Member State has failed to fulfil its obligations.

45 In the present instance, the Commission has adduced in support of its complaint mission reports drawn up by its inspectors.

46 The French Government's line of argument, put forward at the stage of its rejoinder, that the reports to which the Commission referred in its application cannot be used as evidence that the breach of obligations has persisted on the ground that they were never made known to the French authorities, cannot be upheld.

47 It can be seen from the reports adduced by the Commission that all the reports subsequent to 1998, which have been put in evidence in their entirety or in the form of extensive extracts, refer to accounts of meetings in the course of which the competent national authorities were informed of the results of the inspection visits and were therefore able to present their observations on the findings of the Commission's inspectors. While this reference is not found in the earlier reports, put in evidence in the form of extracts limited to the findings of fact made by the inspectors, it is sufficient to point out that in its letter of 1 August 2000, sent to the Commission in response to the supplementary reasoned opinion of 6 June 2000, the French Government set out its observations on the content of those reports without putting in issue the circumstances of their disclosure to the French authorities.

48 That being so, it should be examined whether the information contained in the mission reports adduced by the Commission is such as to establish an objective finding that a breach by the French Republic of its control obligations has persisted.

49 As regards the situation on expiry of the period laid down in the supplementary reasoned opinion of 6 June 2000, it is apparent from the reports to which the Commission referred in that opinion (see paragraph 17 of this judgment) that the inspectors were able to record the presence of undersized fish, on each of the six visits that they made. They were able to record, in particular, that there was a market for undersized hake, offered for sale under the name 'merluchons' or 'friture de merluchons' (small hake) and, in breach of the marketing standards laid down by Regulation No 2406/96, under the code '00'.

50 On five of those six visits, the landing and offering for sale of the undersized fish took place without monitoring by the competent national authorities. As the French Government

acknowledged in its response of 1 August 2000 to the supplementary reasoned opinion of 6 June 2000, the persons whom the inspectors were able to meet 'did not fall within the classes of officers empowered to find infringements of the fishery rules and were not attached to the maritime authorities'. On the sixth visit, the inspectors recorded that undersized fish had been landed and offered for sale in the presence of national authorities empowered to find infringements of the fishery rules. However, those authorities refrained from taking action against the offenders.

51 This evidence enables it to be found that, in the absence of effective action by the competent national authorities, a practice of offering undersized fish for sale persisted which was sufficiently constant and widespread to prejudice seriously, by reason of its cumulative effect, the objectives of the Community system for conservation and management of fishery resources.

52 Moreover, the similarity and recurrence of the situations recorded in all the reports enable it to be held that those instances can only have resulted from structural inadequacy of the measures implemented by the French authorities and, consequently, from a failure on their part to fulfil the obligation imposed on them by the Community rules to carry out controls that are effective, proportionate and a deterrent (see, to this effect, Case C-333/99 *Commission* v *France*, cited above, paragraph 35).

53 It must therefore be found that, on expiry of the period laid down in the supplementary reasoned opinion of 6 June 2000, the French Republic, by failing to carry out controls of fishing activities in accordance with the requirements laid down by the Community provisions, had not taken all the necessary measures to comply with the judgment in Case C-64/88 *Commission* v *France* and was accordingly failing to fulfil its obligations under Article 228 EC.

54 As regards the situation on the date of examination of the facts by the Court, the information available shows that significant deficiencies persisted.

55 On the visit made to Brittany in June 2001 (see paragraph 20 of this judgment), the Commission inspectors were once again able to record the presence of undersized fish. A decrease in the number of cases of such fish being offered for sale was recorded on a subsequent visit to the same area in June 2003 (see paragraph 23 of the present judgment). However, that fact is not decisive in light of the concurring findings, set out in the reports drawn up at the time of those two visits, concerning the ineffectiveness of the controls on land.

56 Where the Commission has adduced sufficient evidence to show that the breach of obligations has persisted, it is for the Member State concerned to challenge in substance and in detail the information produced and its consequences (see, to this effect, Case 272/86 *Commission* v *Greece* [1988] ECR 4875, paragraph 21, and Case C-365/97 *Commission* v *Italy* [1999] ECR I-7773, paragraphs 84 to 87).

57 In this connection, it is to be noted that the information concerning the increase in inspections in pursuance of the plans adopted in 2001 and 2002, on which the French Government relied in its defence, conflicts with the information supplied by it in answer to the Court's questions (see paragraph 26 of this judgment), according to which the number of inspections at sea and on land was lower in 2003 than in 2002.

58 Even if divergent information of that kind can, as the French Government contends, be regarded as showing an improvement in the situation, the fact remains that the efforts made cannot excuse the failures that occurred (Case C-333/99 *Commission* v *France*, paragraph 36).

59 In this connection, the French Government's argument that the decrease in inspections is justified by the improved discipline of fishermen cannot be upheld either.

60 As the French Government has itself pointed out in its defence, actions designed to change behaviour and mentality involve a long process. It must therefore be considered that the

structural deficiency, extending over a period of more than 10 years, of the controls designed to ensure compliance with the rules relating to the minimum size of fish resulted in behaviour on the part of the economic operators concerned that it will be possible to correct only after action over a lengthy period.

61 Accordingly, in light of the detailed evidence submitted by the Commission, the information adduced by the French Government is not sufficiently substantial to demonstrate that the measures which it has implemented regarding the control of fishing activities display the efficacy necessary to meet its obligation to ensure the effectiveness of the Community system for conservation and management of fishery resources (see paragraphs 37 and 38 of the present judgment).

62 It must therefore be found that, on the date upon which the Court examined the facts which were presented to it, the French Republic, by failing to carry out controls of fishing activities in accordance with the requirements laid down by the Community provisions, had not taken all the necessary measures to comply with the judgment in Case C-64/88 *Commission* v *France* and was accordingly failing to fulfil its obligations under Article 228 EC.

The second complaint: inadequacy of action taken

Arguments of the parties

63 The Commission contends that the proceedings brought by the French authorities for infringement of the Community provisions concerning the minimum size of fish are insufficient. Generally, the inadequacy of the controls is reflected in the number of proceedings. Furthermore, it is apparent from the information provided by the French Government that, even when infringements are recorded, action is not systematically taken.

64 The Commission observes that the statistics submitted by the French Government before the period laid down in the supplementary reasoned opinion of 6 June 2000 expired are too general in that they concern the whole of France and do not specify the nature of the infringements in respect of which proceedings were brought.

65 The information provided subsequently cannot be taken as showing that the French authorities apply a policy of deterrent penalties so far as concerns infringements of the rules relating to the minimum size of fish. The Commission points out that, for 2001, the French Government notified, pursuant to Council Regulation (EC) No 1447/1999 of 24 June 1999 establishing a list of types of behaviour which seriously infringe the rules of the common fisheries policy (OJ 1999 L 167, p. 5) and Commission Regulation (EC) No 2740/1999 of 21 December 1999 laying down detailed rules for the application of Regulation No 1447/1999 (OJ 1999 L 328, p. 62), 73 cases of infringement of the rules relating to the minimum size of fish. However, only eight cases, that is to say 11%, resulted in imposition of a fine.

66 While the Commission acknowledges that the circular of the Minister for Justice of 16 October 2002, to which the French Government refers, constitutes an appropriate measure, it considers nevertheless that the way in which the circular will be applied should be checked. In this connection, it observes that the latest figures notified by the French Government for 2003 show a reduction in the number of convictions.

67 The French Government contends that since 1991 the number of infringements in respect of which proceedings have been brought, and the sentences, have been constantly increasing. It stresses, however, that a purely statistical examination of the number of infringements in respect of which proceedings are brought cannot, by itself, give an account of the effectiveness of a control system since it rests on the entirely unproven presupposition that the number of infringements is stable.

68 The French Government refers to a circular which the Minister for Justice addressed on 16 October 2002 to the Principal State Prosecutors at the cours d'appel (Courts of Appeal) of

Rennes, Poitiers, Bordeaux and Pau, recommending that proceedings be systematically brought in respect of infringements and that deterrent penalties be demanded. It acknowledges, however, that the circular could not have full effect in 2002 or 2003 because of Law No 2002-1062, which granted an amnesty in respect of infringements committed before 17 May 2002 in so far as the fine did not exceed EUR 750.

Findings of the Court

69 The obligation on the Member States to make sure that penalties which are effective, proportionate and a deterrent are imposed for infringements of Community rules is of fundamental importance in the field of fisheries. If the competent authorities of a Member State were systematically to refrain from taking action against the persons responsible for such infringements, both the conservation and management of fishery resources and the uniform application of the common fisheries policy would be jeopardised (see, in relation to failure to comply with the quota system for the fishing years 1991 and 1992, Case C-52/95 *Commission* v *France* [1995] ECR I-4443, paragraph 35).

70 So far as concerns, in this instance, the situation on expiry of the period laid down in the supplementary reasoned opinion of 6 June 2000, it is sufficient to recall the findings made in paragraphs 49 to 52 of the present judgment. Since it has been established that infringements which the national authorities could have found to exist were not recorded and since reports were not drawn up in respect of offenders, it is clear that those authorities failed to fulfil the obligation to take action, which the Community rules impose on them (see, to this effect, Case C-64/88 *Commission* v *France*, paragraph 24).

71 As regards the situation on the date upon which the Court examined the facts, reference should be made to the findings in paragraphs 54 to 61 of the present judgment, according to which significant deficiencies in the controls persisted. In light of those findings, the increase in the number of infringements in respect of which proceedings were brought, to which the French Government has referred, cannot be considered sufficient. As the French Government has observed, a purely statistical examination of the number of infringements in respect of which proceedings are brought cannot, by itself, give an account of the effectiveness of a control system.

72 Furthermore, as the Commission has pointed out, it is clear from the information provided by the French Government that proceedings are not brought in respect of all the infringements that are recorded. It is also apparent that deterrent penalties are not imposed in respect of all the infringements in respect of which proceedings are brought. The fact that numerous fisheries infringements were eligible to benefit from Law No 2002-1062 attests that, in all those cases, fines of less than EUR 750 were imposed.

73 Accordingly, in light of the detailed evidence submitted by the Commission, the information adduced by the French Government is not sufficiently substantial to demonstrate that the measures which it has implemented so far as concerns the taking of action in respect of infringements of the fisheries rules display the efficacy, proportionality and deterrence necessary to meet its obligation to ensure the effectiveness of the Community system for conservation and management of fishery resources (see paragraphs 37 and 38 of the present judgment).

74 It must therefore be found that, both on expiry of the period laid down in the supplementary reasoned opinion of 6 June 2000 and on the date upon which the Court examined the facts which were presented to it, the French Republic, by failing to ensure that action was taken in respect of infringements of the rules governing fishing activities in accordance with the requirements laid down by the Community provisions, had not taken all the necessary measures to comply with the judgment in Case C-64/88 *Commission* v *France* and was accordingly failing to fulfil its obligations under Article 228 EC.

Financial penalties for the breach of obligations

75 To punish the failure to comply with the judgment in Case C-64/88 *Commission* v *France*, the Commission suggested that the Court should impose a daily penalty payment on the French Republic from delivery of the present judgment until the day on which the breach of obligations is brought to an end. In light of the particular features of the breach that has been established, the Court considers that it should examine in addition whether imposition of a lump sum could constitute an appropriate measure.

The possibility of imposing both a penalty payment and a lump sum

Arguments of the parties and submissions made to the Court

76 When invited to give their views on whether, in proceedings brought under Article 228(2) EC, the Court may, where it finds that the Member State concerned has not complied with the Court's judgment, impose both a lump sum and a penalty payment on it, the Commission and the Danish, Netherlands, Finnish and United Kingdom Governments answered in the affirmative.

77 Their reasoning is based, essentially, on the fact that those two measures are complementary, in that each of them respectively seeks to achieve a deterrent effect. A combination of those measures should be regarded as one and the same means of achieving the objective laid down by Article 228 EC, that is to say not only to induce the Member State concerned to comply with the initial judgment but also, from a wider viewpoint, to reduce the possibility of similar infringements being committed again.

78 The French, Belgian, Czech, German, Greek, Spanish, Irish, Italian, Cypriot, Hungarian, Austrian, Polish and Portuguese Governments have put forward a contrary view.

79 They rely on the wording of Article 228(2) EC and on the use of the conjunction 'or', to which they accord a disjunctive sense, and on the objective of this provision. The provision is not punitive in nature, since Article 228(2) EC does not seek to punish the defaulting Member State, but only to induce it to comply with a judgment establishing a breach of obligations. It is not possible to distinguish several periods of a breach of obligations; only its entire duration is to be taken into consideration. The imposition of more than one financial penalty is contrary to the principle prohibiting the same conduct from being punished twice. Furthermore, in the absence of Commission guidelines concerning the applicable criteria for calculating a lump sum, imposition of such a sum by the Court would conflict with the principles of legal certainty and transparency. It would also compromise equal treatment between Member States, since such a measure was not envisaged in the judgments in Case C-387/97 *Commission* v *Greece* [2000] ECR I-5047 and Case C-278/01 *Commission* v *Spain* [2003] ECR I-14141.

Findings of the Court

80 The procedure laid down in Article 228(2) EC has the objective of inducing a defaulting Member State to comply with a judgment establishing a breach of obligations and thereby of ensuring that Community law is in fact applied. The measures provided for by that provision, namely a lump sum and a penalty payment, are both intended to achieve this objective.

81 Application of each of those measures depends on their respective ability to meet the objective pursued according to the circumstances of the case. While the imposition of a penalty payment seems particularly suited to inducing a Member State to put an end as soon as possible to a breach of obligations which, in the absence of such a measure, would tend to persist, the imposition of a lump sum is based more on assessment of the effects on public and private interests of the failure of the Member State concerned to comply with its obligations, in particular where the breach has persisted for a long period since the judgment which initially established it.

82 That being so, recourse to both types of penalty provided for in Article 228(2) EC is not

precluded, in particular where the breach of obligations both has continued for a long period and is inclined to persist.

83 This interpretation cannot be countered by reference to the use in Article 228(2) EC of the conjunction 'or' to link the financial penalties capable of being imposed. As the Commission and the Danish, Netherlands, Finnish and United Kingdom Governments have submitted, that conjunction may, linguistically, have an alternative or a cumulative sense and must therefore be read in the context in which it is used. In light of the objective pursued by Article 228 EC, the conjunction 'or' in Article 228(2) EC must be understood as being used in a cumulative sense.

84 The objection raised, in particular by the German, Greek, Hungarian, Austrian and Polish Governments, that imposition of both a penalty payment and a lump sum, taking into consideration the same period of breach twice, would infringe the principle *non bis in idem* must also be rejected. Since each penalty has its own function, it is to be determined in such a way as to fulfil that function. It follows that, where the Court imposes a penalty payment and a lump sum simultaneously, the duration of the breach is taken into consideration as one of a number of criteria, in order to determine the appropriate level of coercion and deterrence.

85 The argument, relied on by the Belgian Government in particular, that, in the absence of guidelines adopted by the Commission for calculating a lump sum, imposition of a lump sum would conflict with the principles of legal certainty and transparency cannot be upheld either. While such guidelines do help to ensure that the Commission acts in a manner which is transparent, foreseeable and consistent with legal certainty (see, in relation to the guidelines concerning calculation of penalty payments, Case C-387/97 *Commission* v *Greece*, cited above, paragraph 87), the fact remains that exercise of the power conferred on the Court by Article 228(2) EC is not subject to the condition that the Commission adopts such rules, which, in any event, cannot bind the Court (Case C-387/97 *Commission* v *Greece*, paragraph 89, and Case C-278/01 *Commission* v *Spain*, cited above, paragraph 41).

86 As to the objection, raised by the French Government, that imposition of both a penalty payment and a lump sum in the present case would compromise equal treatment since it was not envisaged in the judgments in Case C-387/97 *Commission* v *Greece* and Case C-278/01 *Commission* v *Spain*, it is for the Court, in each case, to assess in light of its circumstances the financial penalties to be imposed. Accordingly, the fact that both measures were not imposed in the cases decided previously cannot in itself constitute an obstacle to the imposition of both in a subsequent case, if, having regard to the nature, seriousness and persistence of the breach of obligations established, that appears appropriate.

The Court's discretion as to the financial penalties that can be imposed

Arguments of the parties and submissions made to the Court

87 The Commission and the Czech, Hungarian and Finnish Governments have answered in the affirmative the question whether the Court may, where appropriate, depart from the Commission's suggestions and impose a lump sum on a Member State although the Commission did not suggest this. In their submission, the Court has a discretion in the matter, which extends to determining the penalty considered to be the most appropriate, irrespective of the Commission's suggestions in this regard.

88 The French, Belgian, Danish, German, Greek, Spanish, Irish, Italian, Netherlands, Austrian, Polish and Portuguese Governments take an opposing view. They put forward substantive and procedural arguments. With regard to substance, they submit that exercise by the Court of such a discretion would infringe the principles of legal certainty, predictability, transparency and equal treatment. The German Government adds that the Court in any event lacks the political legitimacy necessary to exercise such a power in a field where assessments of political expediency play a considerable role. At the procedural level, the aforementioned governments stress that so extensive a power is incompatible with the general principle of civil procedure common to all the Member States that courts cannot go beyond the parties' claims, and dwell

upon the need for an *interpartes* procedure enabling the Member State concerned to exercise its rights of defence.

Findings of the Court

89 With regard to the arguments derived from the principles of legal certainty, predictability, transparency and equal treatment, reference should be made to the findings made in paragraphs 85 and 86 of this judgment.

90 So far as concerns the German Government's argument as to the Court's lack of political legitimacy to impose a financial penalty not suggested by the Commission, the various stages involved in the procedure laid down in Article 228(2) EC should be distinguished. Once the Commission has exercised its discretion as to the initiation of infringement proceedings (see, inter alia, in relation to Article 226 EC, the judgment in Case C-74/02 *Commission* v *Germany* [2003] ECR I-9877, paragraph 17, and the judgment of 21 October 2004 in Case C-477/03 *Commission* v *Germany*, not published in the ECR, paragraph 11), the question of whether or not the Member State concerned has complied with a previous judgment of the Court is subjected to a judicial procedure in which political considerations are irrelevant. It is in performance of its judicial function that the Court assesses the extent to which the situation prevailing in the Member State in question complies with the initial judgment and, where appropriate, assesses the seriousness of a persisting breach of obligations. It follows that, as the Advocate General has observed in point 24 of his Opinion of 18 November 2004, the appropriateness of imposing a financial penalty and the choice of the penalty most suited to the circumstances of the case can be appraised only in the light of the findings made by the Court in the judgment to be delivered under Article 228(2) EC and therefore fall outside the political sphere.

91 The argument that, in departing from or going beyond the Commission's suggestions, the Court infringes a general principle of procedural law which prohibits courts from going beyond the parties' claims is not well founded either. The procedure provided for in Article 228(2) EC is a special judicial procedure, peculiar to Community law, which cannot be equated with a civil procedure. The order imposing a penalty payment and/or a lump sum is not intended to compensate for damage caused by the Member State concerned, but to place it under economic pressure which induces it to put an end to the breach established. The financial penalties imposed must therefore be decided upon according to the degree of persuasion needed in order for the Member State in question to alter its conduct.

92 As regards the rights of defence that the Member State concerned must be able to exercise, which have been dwelt upon by the French, Belgian, Netherlands, Austrian and Finnish Governments, the procedure laid down in Article 228(2) EC must, as the Advocate General has observed in point 11 of his Opinion of 18 November 2004, be regarded as a special judicial procedure for the enforcement of judgments, in other words as a method of enforcement. It is in this context, therefore, that the procedural guarantees which must be available to the Member State in question are to be assessed.

93 It follows that, once it has been found in *interpartes* proceedings that a breach of Community law persists, the rights of defence which are to be accorded to the defaulting Member State so far as concerns the financial penalties envisaged must take account of the objective pursued, namely securing and guaranteeing that the law is again complied with.

94 In the present case, so far as concerns the truth with regard to the conduct liable to give rise to the imposition of financial penalties, the French Republic had the opportunity to defend itself throughout a pre-litigation procedure which lasted nearly nine years and gave rise to two reasoned opinions, and, in the present proceedings, in the course of the written procedure and at the hearing of 3 March 2004. That examination of the facts led the Court to find that a breach by the French Republic of its obligations persisted (see paragraph 74 of the present judgment).

95 The Commission which, in the two reasoned opinions, had drawn the risk of financial penalties

to the attention of the French Republic (see paragraphs 15 and 18 of the present judgment), indicated to the Court the criteria (see paragraph 98 of the present judgment) capable of being taken into consideration when determining the financial penalties intended to exert sufficient economic pressure on the French Republic to prompt it to put an end to its breach of obligations as rapidly as possible, and the respective weightings to be given to those criteria. The French Republic set out its views on the criteria in the written procedure and at the hearing on 3 March 2004.

96 By order of 16 June 2004, the Court requested the parties to give their views on whether, where the Court finds that a Member State has not taken the necessary measures to comply with a previous judgment and the Commission has requested the Court to impose a penalty payment on that State, the Court may impose on the Member State a lump sum or, as the case may be, a lump sum and a penalty payment. The parties stated their views at the hearing on 5 October 2004.

97 It follows that the French Republic has been able to make its submissions on all the matters of law and of fact necessary for establishing that the breach of obligations alleged against it has persisted and for deciding upon the seriousness of the breach and the measures which may be adopted in order to bring it to an end. On the basis of those matters, which have been the subject of *inter partes* proceedings, it is for the Court to determine, according to the degree of persuasion and deterrence which appears to it to be required, the financial penalties appropriate for making sure that the judgment in Case C-64/88 *Commission* v *France* is complied with as rapidly as possible and preventing similar infringements of Community law from recurring.

The financial penalties appropriate in the present case

Imposition of a penalty payment

98 On the basis of the method of calculation which it has set out in its communication 97/C 63/02 of 28 February 1997 on the method of calculating the penalty payments provided for pursuant to Article [228] of the EC Treaty (OJ 1997 C 63, p. 2), the Commission suggested that the Court should impose on the French Republic a penalty payment of EUR 316 500 for each day of delay by way of penalty for non-compliance with the judgment in Case C-64/88 *Commission* v *France*, from the date of delivery of the judgment in the present case until the day on which the judgment in Case C-64/88 *Commission* v *France* has been complied with.

99 The Commission considers that an order imposing a penalty payment is the most appropriate instrument for putting an end as soon as possible to the infringement which has been established and that, in the present case, a penalty payment of EUR 316 500 for each day of delay fits the seriousness and duration of the infringement, due regard being had to the need to make the penalty effective. That sum is calculated by multiplying a uniform basic amount of EUR 500 by a coefficient of 10 (on a scale of 1 to 20) for the seriousness of the infringement, by a coefficient of 3 (on a scale of 1 to 3) for the duration of the infringement and by a coefficient of 21.1 (based on the gross domestic product of the Member State in question and the weighting of votes in the Council of the European Union), which is deemed to reflect the ability to pay of the Member State concerned.

100 The French Government submits that there is no reason to impose a penalty payment because it has brought the breach of obligations to an end and, in the alternative, that the amount of the penalty payment requested is disproportionate.

101 It points out that, so far as the seriousness of the infringement is concerned, in Case C-387/97 *Commission* v *Greece* the Commission suggested a coefficient of 6, although the breach of obligations compromised public health and no measure had been taken with a view to complying with the previous judgment, two factors which are absent here. Accordingly, the coefficient of 10 suggested by the Commission in the present case is not acceptable.

102 The French Government also maintains that the measures required to comply with the

judgment in Case C-64/88 *Commission* v *France* were unable to produce immediate effects. Given the inevitable time-lag between the adoption of the measures and their impact becoming perceptible, the Court cannot take into account the whole of the period passing between delivery of the first judgment and that of the forthcoming judgment.

103 As to those submissions, while it is clear that a penalty payment is likely to encourage the defaulting Member State to put an end as soon as possible to the breach that has been established (Case C-278/01 *Commission* v *Spain*, paragraph 42), it should be remembered that the Commission's suggestions cannot bind the Court and are only a useful point of reference (Case C-387/97 *Commission* v *Greece*, paragraph 89). In exercising its discretion, it is for the Court to set the penalty payment so that it is appropriate to the circumstances and proportionate both to the breach that has been established and to the ability to pay of the Member State concerned (see, to this effect, Case C-387/97 *Commission* v *Greece*, paragraph 90, and Case C-278/01 *Commission* v *Spain*, paragraph 41).

104 In that light, and as the Commission has suggested in its communication of 28 February 1997, the basic criteria which must be taken into account in order to ensure that penalty payments have coercive force and Community law is applied uniformly and effectively are, in principle, the duration of the infringement, its degree of seriousness and the ability of the Member State to pay. In applying those criteria, regard should be had in particular to the effects of failure to comply on private and public interests and to the urgency of getting the Member State concerned to fulfil its obligations (Case C-387/97 *Commission* v *Greece*, paragraph 92).

105 As regards the seriousness of the infringement and, in particular, the effects of failure to comply on private and public interests, it is to be remembered that one of the key elements of the common fisheries policy consists in rational and responsible exploitation of aquatic resources on a sustainable basis, in appropriate economic and social conditions. In this context, the protection of juvenile fish proves decisive for reestablishing stocks. Failure to comply with the technical measures of conservation prescribed by the common policy, in particular the requirements regarding the minimum size of fish, therefore constitutes a serious threat to the maintenance of certain species and certain fishing grounds and jeopardises pursuit of the fundamental objective of the common fisheries policy.

106 Since the administrative measures adopted by the French authorities have not been implemented in an effective manner, they cannot reduce the seriousness of the breach established.

107 Having regard to those factors, the coefficient of 10 (on a scale of 1 to 20) is therefore an appropriate reflection of the degree of seriousness of the infringement.

108 As regards the duration of the infringement, suffice it to state that it is considerable, even if the starting date be that on which the Treaty on European Union entered into force and not the date on which the judgment in Case C-64/88 *Commission* v *France* was delivered (see, to this effect, Case C-387/97 *Commission* v *Greece*, paragraph 98). Accordingly, the coefficient of 3 (on a scale of 1 to 3) suggested by the Commission appears appropriate.

109 The Commission's suggestion of multiplying a basic amount by a coefficient of 21.1 based on the gross domestic product of the French Republic and on the number of votes which it has in the Council is an appropriate way of reflecting that Member State's ability to pay, while keeping the variation between Member States within a reasonable range (see Case C-387/97 *Commission* v *Greece*, paragraph 88, and Case C-278/01 *Commission* v *Spain*, paragraph 59).

110 Multiplying the basic amount of EUR 500 by the coefficients of 21.1 (for ability to pay), 10 (for the seriousness of the infringement) and 3 (for the duration of the infringement) gives a sum of EUR 316 500 per day.

111 As regards the frequency of the penalty payment, account should, however, be taken of the fact that the French authorities have adopted administrative measures which could serve as a

framework for implementation of the measures required to comply with the judgment in Case C-64/88 *Commission* v *France*. Nevertheless, it is not possible for the necessary adjustments to previous practices to be instantaneous or their impact to be perceived immediately. It follows that any finding that the infringement has come to an end could be made only after a period allowing an overall assessment to be made of the results obtained.

112 Having regard to those considerations, the penalty payment must be imposed not on a daily basis, but on a half-yearly basis.

113 In light of all of the foregoing, the French Republic should be ordered to pay to the Commission, into the account 'European Community own resources', a penalty payment of 182.5 x EUR 316 500, that is to say of EUR 57 761 250, for each period of six months from delivery of the present judgment at the end of which the judgment in Case C-64/88 *Commission* v *France* has not yet been fully complied with.

Imposition of a lump sum

114 In a situation such as that which is the subject of the present judgment, in light of the fact that the breach of obligations has persisted for a long period since the judgment which initially established it and of the public and private interests at issue, it is essential to order payment of a lump sum (see paragraph 81 of the present judgment).

115 The specific circumstances of the case are fairly assessed by setting the amount of the lump sum which the French Republic will have to pay at EUR 20 000 000.

116 The French Republic should therefore be ordered to pay to the Commission, into the account 'European Community own resources', a lump sum of EUR 20 000 000.

Costs

117 Under Article 69(2) of the Rules of Procedure, the unsuccessful party is to be ordered to pay the costs if they have been applied for in the successful party's pleadings. Since the Commission has applied for costs and the French Republic has been unsuccessful, the latter must be ordered to pay the costs.

On those grounds, the Court (Grand Chamber) hereby:

1. Declares that:

– by failing to carry out controls of fishing activities in accordance with the requirements laid down by the Community provisions, and

– by failing to ensure that action is taken in respect of infringements of the rules governing fishing activities in accordance with the requirements laid down by the Community provisions,

the French Republic has not implemented all the necessary measures to comply with the judgment of 11 June 1991 in Case C-64/88 *Commission* v *France* and has accordingly failed to fulfil its obligations under Article 228 EC;

2. Orders the French Republic to pay to the Commission of the European Communities, into the account 'European Community own resources', a penalty payment of EUR 57 761 250 for each period of six months from delivery of the present judgment at the end of which the judgment in Case C-64/88 *Commission* v *France* has not yet been fully complied with;

3. Orders the French Republic to pay to the Commission of the European Communities, into the account 'European Community own resources', a lump sum of EUR 20 000 000;

4. Orders the French Republic to pay the costs.

[Signatures]

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* Language of the case: French.

Case C-466/04

Manuel Acereda Herrera

v

Servicio Cántabro de Salud

(Reference for a preliminary ruling from the
Tribunal Superior de Justicia de Cantabria)

(Social security — Hospital costs incurred in another Member State — Travel, accommodation and subsistence costs — Article 22 of Regulation (EEC) No 1408/71)

Summary of the Judgment

1. *Social security for migrant workers — Sickness insurance — Benefits provided in another Member State — Articles 22(1)(c) and 36 of Regulation No 1408/71*

(Art. 49 EC; Council Regulation No 1408/71, Arts 22(1)(c) and (2) and 36)

2. *Social security for migrant workers — Sickness insurance — Benefits provided in another Member State*

(Art. 10 EC; Council Regulation No 1408/71, Art. 22(1)(a) and (c))

3. *Preliminary rulings — Jurisdiction of the Court — Limits*

(Art. 234 EC)

1. Article 22(1)(c) and (2) and Article 36 of Regulation No 1408/71, as amended and updated by Regulation No 118/97, must be interpreted as meaning that authorisation by the competent institution for an insured person to go to another Member State in order there to receive hospital treatment appropriate to his medical condition does not confer on such a person the right to be reimbursed by the competent institution for the costs of travel, accommodation and subsistence which that person and any person accompanying him incurred in the territory of that latter Member State, with the exception of the costs of accommodation and meals in hospital for the insured person himself.

First, the obligation imposed on the competent institution by Article 22(1)(c)(i) of Regulation No 1408/71, so far as benefits in kind are concerned, relates exclusively to the expenditure connected with the healthcare received by the insured person in the host Member State, namely, in the case of hospital treatment, the cost of medical services strictly defined and the inextricably linked costs relating to the stay and meals in the hospital. Likewise, the concept of 'cash benefits' within the meaning of that article does not refer to the reimbursement of expenditure already incurred, such as ancillary costs like travel, accommodation and subsistence costs incurred in the territory of that Member State by the insured person and the person accompanying him.

Secondly, Article 36 of Regulation No 1408/71 is exclusively concerned with the issue of reimbursements between institutions and does not confer any entitlement on persons insured.

That interpretation is without prejudice to the outcome which would result were Article 49 EC found to be applicable. That article precludes national legislation which excludes reimbursement of the ancillary costs incurred by a patient authorised to go to another Member State in order there to receive hospital treatment whilst providing for the reim-

bursement of those costs where the treatment is provided in a hospital covered by the national system.

(see paras 28, 33, 36, 38-39, operative part 1)

2. National legislation in which provision is made for entitlement to benefits additional to those provided for in Article 22(1) of Regulation No 1408/71, as amended and updated by Regulation No 118/97, in the situation covered by paragraph (1)(a) of that article, but not in that covered by paragraph (1)(c) thereof, does not obstruct the direct effect of that provision or infringe the principle of cooperation in good faith stemming from Article 10 EC.

(see para. 45, operative part 2)

3. It is solely for the national court before which the dispute has been brought, and which must assume responsibility for the subsequent judicial decision, to determine in the light of the particular circumstances of the case both the need for a preliminary ruling in order to enable it to deliver judgment and the relevance of the questions which it submits to the Court.

Nevertheless, the Court cannot give a preliminary ruling on a question submitted by a national court where it is quite obvious that the ruling sought by that court on the interpretation or validity of Community law bears no relation to the actual facts of the main action or its purpose, where the problem is hypothetical. The justification for a reference for a preliminary ruling is not that it enables advisory opinions on general or hypothetical questions to be delivered but rather that it is necessary for the effective resolution of a dispute.

(see paras 47-49)

Case C-344/04

The Queen on the application of:

International Air Transport Association

and

European Low Fares Airline Association

v

Department for Transport

(Reference for a preliminary ruling from the High Court of Justice of England and Wales, Queen's Bench Division (Administrative Court))

(Carriage by air – Regulation (EC) No 261/2004 – Articles 5, 6 and 7 – Compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights – Validity – Interpretation of Article 234 EC)

Summary of the Judgment

1. *Preliminary rulings – Reference to the Court – Challenge to the validity of a Community act before a national court*

   (Art. 234, para. 2, EC)

2. *Transport – Carriage by air – Regulation No 261/2004 – Measures to assist and take care of passengers in the event of a long delay to a flight*

   (European Parliament and Council Regulation No 261/2004, Art. 6; Montreal Convention 1999)

3. *Acts of the institutions – Statement of reasons – Obligation – Scope*

   (Art. 253 EC; European Parliament and Council Regulation No 261/2004, Arts 5, 6 and 7)

4. *Transport – Carriage by air – Regulation No 261/2004 – Measures to assist, take care of and compensate passengers in the event of cancellation of, or a long delay to, a flight*

   (European Parliament and Council Regulation No 261/2004, Arts 5, 6 and 7)

5. *Transport – Carriage by air – Regulation No 261/2004 – Measures to assist, take care of and compensate passengers in the event of cancellation of, or a long delay to, a flight*

   (European Parliament and Council Regulation No 261/2004, Arts 5, 6 and 7)

1. The fact that the validity of a Community act is contested before a national court is not in itself sufficient to warrant referral of a question to the Court of Justice for a preliminary ruling.

   Courts against whose decisions there is a judicial remedy under national law may examine the validity of a Community act and, if they consider that the arguments put forward before them by the parties in support of invalidity are unfounded, they may reject them, concluding that the act is completely valid, given that, in so doing, they are not

calling into question the existence of the Community act.

On the other hand, where such a court considers that one or more arguments for invalidity of a Community act which have been put forward by the parties or, as the case may be, raised by it of its own motion are well founded, it must stay proceedings and make a reference to the Court for a preliminary ruling on the act's validity.

(see paras 28-30, 32, operative part 1)

2. The measures to assist and take care of passengers in the event of a long delay to a flight which are prescribed in Article 6 of Regulation No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights constitute standardised and immediate measures to redress the damage which is linked to the inconvenience that delay in the carriage of passengers by air causes.

These measures are not among those the institution of which is regulated by the Montreal Convention for the Unification of Certain Rules for International Carriage by Air and cannot therefore be considered inconsistent with the Convention.

That Convention governs the conditions under which, after a flight has been delayed, the passengers concerned may bring actions for damages by way of redress on an individual basis from the carriers liable for damage resulting from that delay, but does not shield those carriers from any other form of intervention.

The standardised and immediate measures prescribed in Article 6 of Regulation No 261/2004 do not prevent the passengers concerned, should the same delay also cause them damage conferring entitlement to compensation, from being able to bring in addition actions to redress that damage under the conditions laid down by the Montreal Convention.

(see paras 44-48)

3. Articles 5, 6 and 7 of Regulation No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights are not invalid by reason of breach of the obligation to state reasons.

Regulation No 261/2004 clearly discloses the essential objective pursued by the institutions and thus cannot be required to contain a specific statement of reasons for each of the technical choices made. Since the objective of protecting passengers required acceptance of standardised and effective compensatory measures which could not give rise to discussion at the very moment when they were to be applied, a situation which the defence of extraordinary circumstances would not have failed to bring about, the Community legislature was able, without breaching its obligation to state reasons, to refrain from setting out the reasons why it considered that operating air carriers could not rely on such a defence in order to be exempted from their obligations to assist and take care of passengers laid down in Articles 5 and 6 of the regulation. Likewise, the Community legislature was able, without rendering the act in question unlawful, to lay down in Article 7 the principle that fixed compensation was payable in the event of cancellation of a flight and the amount of the compensation without setting out the reasons why it had chosen that measure and that amount.

(see paras 69-70, 72, 77)

4. Given that the Community legislature is allowed a broad discretion in the field of the common transport policy, the legality, from the point of view of observance of the principle of proportionality, of a measure adopted in that field can be affected only if the

measure is manifestly inappropriate having regard to the objective which the competent institution is seeking to pursue.

The measures to assist, care for and compensate passengers that are prescribed in Articles 5, 6 and 7 of Regulation No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights do not appear manifestly inappropriate to the objective pursued by the Community legislature, which relates to strengthening protection for passengers who suffer cancellation of, or long delays to, flights. On the contrary, the measures prescribed by Articles 5 and 6 of the regulation are in themselves capable of immediately redressing some of the damage suffered by those passengers and therefore enable a high level of passenger protection to be ensured. Furthermore, the criteria adopted for determining the passengers' entitlement to those measures, namely the length of the delay and the wait for the next flight or the time taken to inform them of the flight's cancellation, do not appear in any way unrelated to the requirement for proportionality. Also, given that the standardised and immediate compensatory measures at issue vary according to the significance of the damage suffered by the passengers, they likewise do not appear to be manifestly inappropriate merely because carriers cannot rely on the defence of extraordinary circumstances.

Next, it has not been established that if passengers were to take out voluntary insurance to cover the risks inherent in flight delays and cancellations, that would in any event make it possible to remedy the damage suffered by passengers on the spot. Such a measure cannot, therefore, be regarded as being more appropriate to the objective pursued than those chosen by the Community legislature.

Also, since the harmful consequences to which a delay gives rise are in no way related to the price paid for a ticket, the argument that the measures chosen to alleviate those consequences should have been determined in proportion to the cost of the ticket cannot be upheld.

Finally, the compensation prescribed in Article 7 of the regulation, which passengers may claim when they have been informed of a flight cancellation too late, does not appear manifestly inappropriate to the objective pursued, given the existence of the extraordinary circumstances defence enabling air carriers to be exempted from paying that compensation and of the conditions restricting the application of this obligation. Furthermore, the amount of the compensation, set on the basis of the distance of the flights concerned, likewise does not appear excessive.

(see paras 80, 82, 84-88, 91)

5. Articles 5, 6 and 7 of Regulation No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, which impose the same obligations on all air carriers, are not invalid by reason of a breach of the principle of equal treatment, even though such obligations are not placed on other means of transport.

First, the situations of undertakings operating in different transport sectors are not comparable since modes of transport are not interchangeable as regards the conditions of their use.

Second, with regard to air transport, passengers whose flights are cancelled or subject to a long delay are in an objectively different situation from that experienced by passengers on other means of transport in the event of incidents of the same nature.

Furthermore, the damage suffered by passengers of air carriers in the event of cancellation of, or a long delay to, a flight is similar whatever the airline with which they have a contract and is unrelated to the pricing policies operated by the airline.

Accordingly, if the Community legislature is not to infringe the principle of equality, having regard to the aim pursued by the regulation of increasing protection for all passengers of air carriers, it is incumbent upon it to treat all airlines identically.

(see paras 96-99)

JUDGMENT OF THE COURT (Grand Chamber)

10 January 2006 (*)

(Carriage by air – Regulation (EC) No 261/2004 – Articles 5, 6 and 7 –Compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights – Validity – Interpretation of Article 234 EC)

In Case C-344/04,

REFERENCE for a preliminary ruling under Article 234 EC from the High Court of Justice of England and Wales, Queen's Bench Division (Administrative Court), made by decision of 14 July 2004, received at the Court on 12 August 2004, in the proceedings

The Queen on the application of:

International Air Transport Association,

European Low Fares Airline Association

v

Department for Transport,

THE COURT (Grand Chamber),

composed of V. Skouris, President, P. Jann, C.W.A. Timmermans, A. Rosas, K. Schiemann and J. Malenovský (Rapporteur), Presidents of Chambers, C. Gulmann, R. Silva de Lapuerta, K. Lenaerts, P. Kūris, E. Juhász, G. Arestis and A. Borg Barthet, Judges**,**

Advocate General: L.A. Geelhoed,

Registrar: L. Hewlett, Principal Administrator,

having regard to the written procedure and further to the hearing on 7 June 2005,

after considering the observations submitted on behalf of:

– the International Air Transport Association, by M. Brealey QC and M. Demetriou, Barrister, instructed by J. Balfour, Solicitor,

– the European Low Fares Airline Association, by G. Berrisch, Rechtsanwalt, and C. Garcia Molyneux, abogado,

– the United Kingdom Government, by M. Bethell, acting as Agent, and C. Lewis, Barrister,

– the European Parliament, by K. Bradley and M. Gómez Leal, acting as Agents,

– the Council of the European Union, by E. Karlsson, K. Michoel and R. Szostak, acting as Agents,

– the Commission of the European Communities, by F. Benyon and M. Huttunen, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 8 September 2005,

gives the following

Judgment

1 This reference for a preliminary ruling concerns, first, the validity of Articles 5, 6 and 7 of Regulation (EC) No 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) No 295/91 (OJ 2004 L 46, p. 1). It concerns, secondly, the interpretation of the second paragraph of Article 234 EC.

2 The reference was made in proceedings brought by the International Air Transport Association ('IATA') and the European Low Fares Airline Association ('ELFAA') against the Department for Transport concerning the implementation of Regulation No 261/2004.

Legal context

International rules

3 The Convention for the Unification of Certain Rules for International Carriage by Air ('the Montreal Convention') was approved by decision of the Council of 5 April 2001 (OJ 2001 L 194, p. 38).

4 Chapter III of the Montreal Convention, headed 'Liability of the carrier and extent of compensation for damage', is comprised by Articles 17 to 37.

5 Article 19 of the Convention, headed 'Delay', provides:

'The carrier is liable for damage occasioned by delay in the carriage by air of passengers, baggage or cargo. Nevertheless, the carrier shall not be liable for damage occasioned by delay if it proves that it and its servants and agents took all measures that could reasonably be required to avoid the damage or that it was impossible for it or them to take such measures.'

6 Article 22(1) of the Convention limits the liability of the carrier for delay to 4 150 Special Drawing Rights (SDRs) for each passenger. Article 22(5) essentially provides that this limit is not to apply if the damage results from an act or omission of the carrier, done with intent to cause damage or recklessly and with knowledge that damage would probably result.

7 Article 29 of the Convention, headed 'Basis of claims', reads as follows:

'In the carriage of passengers, baggage and cargo, any action for damages, however founded, whether under this Convention or in contract or in tort or otherwise, can only be brought subject to the conditions and such limits of liability as are set out in this Convention without prejudice to the question as to who are the persons who have the right to bring suit and what are their respective rights. In any such action, punitive, exemplary or any other non-compensatory

damages shall not be recoverable.'

Community rules

Regulation (EC) No 2027/97

8 Council Regulation (EC) No 2027/97 of 9 October 1997 on air carrier liability in the event of accidents (OJ 1997 L 285, p. 1) was amended by Regulation (EC) No 889/2002 of the European Parliament and of the Council of 13 May 2002 (OJ 2002 L 140, p. 2) ('Regulation No 2027/97').

9 Article 3(1) of Regulation No 2027/97 provides:

'The liability of a Community air carrier in respect of passengers and their baggage shall be governed by all provisions of the Montreal Convention relevant to such liability.'

10 The annex to Regulation No 2027/97 contains inter alia the following provisions, under the heading 'Passenger delays':

'In case of passenger delay, the air carrier is liable for damage unless it took all reasonable measures to avoid the damage or it was impossible to take such measures. The liability for passenger delay is limited to 4 150 SDRs (approximate amount in local currency).'

Regulation No 261/2004

11 The first and second recitals in the preamble to Regulation No 261/2004 are worded as follows:

'(1) Action by the Community in the field of air transport should aim, among other things, at ensuring a high level of protection for passengers. Moreover, full account should be taken of the requirements of consumer protection in general.

(2) Denied boarding and cancellation or long delay of flights cause serious trouble and inconvenience to passengers.'

12 The 12th recital in the preamble states:

'The trouble and inconvenience to passengers caused by cancellation of flights should also be reduced. This should be achieved by inducing carriers to inform passengers of cancellations before the scheduled time of departure and in addition to offer them reasonable re-routing, so that the passengers can make other arrangements. Air carriers should compensate passengers if they fail to do this, except when the cancellation occurs in extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken.'

13 The 14th recital states:

'As under the Montreal Convention, obligations on operating air carriers should be limited or excluded in cases where an event has been caused by extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken. Such circumstances may, in particular, occur in cases of political instability, meteorological conditions incompatible with the operation of the flight concerned, security risks, unexpected flight safety shortcomings and strikes that affect the operation of an operating air carrier.'

14 Article 5 of Regulation No 261/2004, headed 'Cancellation', states:

'1. In case of cancellation of a flight, the passengers concerned shall:

(a) be offered assistance by the operating air carrier in accordance with Article 8; and

(b) be offered assistance by the operating air carrier in accordance with Article 9(1)(a) and 9(2), as well as, in event of re-routing when the reasonably expected time of departure of the new flight is at least the day after the departure as it was planned for the cancelled flight, the assistance specified in Article 9(1)(b) and 9(1)(c); and

(c) have the right to compensation by the operating air carrier in accordance with Article 7, unless:

(i) they are informed of the cancellation at least two weeks before the scheduled time of departure; or

(ii) they are informed of the cancellation between two weeks and seven days before the scheduled time of departure and are offered re-routing, allowing them to depart no more than two hours before the scheduled time of departure and to reach their final destination less than four hours after the scheduled time of arrival; or

(iii) they are informed of the cancellation less than seven days before the scheduled time of departure and are offered re-routing, allowing them to depart no more than one hour before the scheduled time of departure and to reach their final destination less than two hours after the scheduled time of arrival.

2. When passengers are informed of the cancellation, an explanation shall be given concerning possible alternative transport.

3. An operating air carrier shall not be obliged to pay compensation in accordance with Article 7, if it can prove that the cancellation is caused by extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken.

4. The burden of proof concerning the questions as to whether and when the passenger has been informed of the cancellation of the flight shall rest with the operating air carrier.'

15 Article 6 of Regulation No 261/2004, headed 'Delay', is worded as follows:

'1. When an operating air carrier reasonably expects a flight to be delayed beyond its scheduled time of departure:

(a) for two hours or more in the case of flights of 1 500 kilometres or less; or

(b) for three hours or more in the case of all intra-Community flights of more than 1 500 kilometres and of all other flights between 1 500 and 3 500 kilometres; or

(c) for four hours or more in the case of all flights not falling under (a) or (b),

passengers shall be offered by the operating air carrier:

(i) the assistance specified in Article 9(1)(a) and 9(2); and

(ii) when the reasonably expected time of departure is at least the day after the time of departure previously announced, the assistance specified in Article 9(1)(b) and 9(1)(c); and

(iii) when the delay is at least five hours, the assistance specified in Article 8(1)(a).

2. In any event, the assistance shall be offered within the time-limits set out above with respect to each distance bracket.'

16 Article 7 of Regulation No 261/2004, headed 'Right to compensation', provides:

‘1. Where reference is made to this Article, passengers shall receive compensation amounting to:

(a) EUR 250 for all flights of 1 500 kilometres or less;

(b) EUR 400 for all intra-Community flights of more than 1 500 kilometres, and for all other flights between 1 500 and 3 500 kilometres;

(c) EUR 600 for all flights not falling under (a) or (b).

In determining the distance, the basis shall be the last destination at which the denial of boarding or cancellation will delay the passenger’s arrival after the scheduled time.

2. When passengers are offered re-routing to their final destination on an alternative flight pursuant to Article 8, the arrival time of which does not exceed the scheduled arrival time of the flight originally booked

(a) by two hours, in respect of all flights of 1 500 kilometres or less; or

(b) by three hours, in respect of all intra-Community flights of more than 1 500 kilometres and for all other flights between 1 500 and 3 500 kilometres; or

(c) by four hours, in respect of all flights not falling under (a) or (b),

the operating air carrier may reduce the compensation provided for in paragraph 1 by 50%.

3. The compensation referred to in paragraph 1 shall be paid in cash, by electronic bank transfer, bank orders or bank cheques or, with the signed agreement of the passenger, in travel vouchers and/or other services.

4. The distances given in paragraphs 1 and 2 shall be measured by the great circle route method.’

17 Article 8 of Regulation No 261/2004, headed ‘Right to reimbursement or re-routing’, states:

‘1. Where reference is made to this Article, passengers shall be offered the choice between:

(a) – reimbursement within seven days, by the means provided for in Article 7(3), of the full cost of the ticket at the price at which it was bought, for the part or parts of the journey not made, and for the part or parts already made if the flight is no longer serving any purpose in relation to the passenger’s original travel plan, together with, when relevant,

– a return flight to the first point of departure, at the earliest opportunity;

(b) re-routing, under comparable transport conditions, to their final destination at the earliest opportunity; or

(c) re-routing, under comparable transport conditions, to their final destination at a later date at the passenger’s convenience, subject to availability of seats.

2. Paragraph 1(a) shall also apply to passengers whose flights form part of a package, except for the right to reimbursement where such right arises under Directive 90/314/EEC.

3. When, in the case where a town, city or region is served by several airports, an operating air carrier offers a passenger a flight to an airport alternative to that for which the booking was made, the operating air carrier shall bear the cost of transferring the passenger from that alternative airport either to that for which the booking was made, or to another close-by

destination agreed with the passenger.'

18 Article 9 of Regulation No 261/2004, headed 'Right to care', provides:

'1. Where reference is made to this Article, passengers shall be offered free of charge:

(a) meals and refreshments in a reasonable relation to the waiting time;

(b) hotel accommodation in cases

– where a stay of one or more nights becomes necessary, or

– where a stay additional to that intended by the passenger becomes necessary;

(c) transport between the airport and place of accommodation (hotel or other).

2. In addition, passengers shall be offered free of charge two telephone calls, telex or fax messages, or e-mails.

3. In applying this Article, the operating air carrier shall pay particular attention to the needs of persons with reduced mobility and any persons accompanying them, as well as to the needs of unaccompanied children.'

The main proceedings and the questions referred for a preliminary ruling

19 IATA is an association comprising 270 airlines from 130 countries, which carry 98% of scheduled international air passengers worldwide. ELFAA was established as an unincorporated association in January 2004 and represents the interests of 10 low-fare airlines from 9 European countries. These two associations each brought before the High Court of Justice of England and Wales, Queen's Bench Division (Administrative Court), judicial review proceedings against the Department for Transport relating to the implementation of Regulation No 261/2004.

20 The High Court of Justice, satisfied that the claimants' arguments were not without substance, decided to refer to the Court of Justice the seven questions put forward by them contesting the validity of Regulation No 261/2004. Since the Department for Transport doubted that a reference on six of those questions was necessary as they did not, in its view, raise any real doubt as to the validity of the regulation, the High Court of Justice wished to ascertain what test had to be satisfied, or what threshold passed, before a question concerning the validity of a Community instrument had to be referred to the Court of Justice on the basis of the second paragraph of Article 234 EC. In those circumstances, the High Court of Justice of England and Wales, Queen's Bench Division (Administrative Court), decided to stay proceedings and to refer the following questions to the Court of Justice for a preliminary ruling:

'(1) Whether Article 6 of Regulation No 261/2004 is invalid on grounds that it is inconsistent with the … Montreal Convention …, and in particular Articles 19, 22 and 29 [thereof], and whether this (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(2) Whether the amendment of Article 5 of the Regulation during consideration of the draft text by the Conciliation Committee was done in a manner that is inconsistent with the procedural requirements provided for in Article 251 EC and, if so, whether Article 5 of the Regulation is invalid and, if so, whether this (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(3) Whether Articles 5 and 6 of Regulation No 261/2004 (or part thereof) are invalid on grounds that they are inconsistent with the principle of legal certainty, and if so whether

this invalidity (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(4) Whether Articles 5 and 6 of Regulation No 261/2004 (or part thereof) are invalid on grounds that they are not supported by any or any adequate reasoning, and if so whether this invalidity (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(5) Whether Articles 5 and 6 of Regulation No 261/2004 (or part thereof) are invalid on grounds that they are inconsistent with the principle of proportionality required of any Community measure, and if so whether this invalidity (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(6) Whether Articles 5 and 6 of Regulation No 261/2004 (or part thereof) are invalid on grounds that they discriminate, in particular, against the members of the second Claimant organisation in a manner that is arbitrary or not objectively justified, and if so whether this invalidity (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(7) Is Article 7 of the Regulation (or part thereof) void or invalid on grounds that the imposition of a fixed liability in the event of flight cancellation for reasons that are not covered by the extraordinary circumstances defence is discriminatory, fails to meet the standards of proportionality required of any Community measure, or is not based on any adequate reasoning, and if so whether this invalidity (in conjunction with any other relevant factors) affects the validity of the Regulation as a whole?

(8) In circumstances where a national court has granted permission to bring a claim in that national court, which raises questions as to the validity of provisions of a Community instrument and which it considers is arguable and not unfounded, are there any principles of Community law in connection with any test or threshold which the national court should apply when deciding under [the second paragraph of Article 234] EC whether to refer those questions of validity to the [Court of Justice of the European Communities]?'

21 By order of the President of the Court of 24 September 2004, the referring court's request that the accelerated procedure provided for in the first paragraph of Article 104a of the Rules of Procedure be applied to the present case was rejected.

The questions

Question 8

22 By its eighth question, which it is appropriate to examine first, the referring court asks, in essence, whether the second paragraph of Article 234 EC is to be interpreted as requiring a national court to refer a question as to the validity of a Community act to the Court of Justice for a preliminary ruling only if there is more than a certain degree of doubt concerning its validity.

Admissibility

23 The European Parliament contends that the question is inadmissible since no answer which the Court might provide to the question would be of any assistance for the decision in the case before the referring court, which relates to the validity of Regulation No 261/2004.

24 It is settled case-law that a reference from a national court may be refused only if it is quite obvious that the interpretation of Community law sought bears no relation to the actual facts of the main action or to its purpose, or where the problem is hypothetical or the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it (see, inter alia, Case C-415/93 *Bosman* [1995] ECR I-4921, paragraph 61; Case

C-105/94 *Celestini* [1997] ECR I-2971, paragraph 22; and Case C-355/97 *Beckand Bergdorf* [1999] ECR I-4977, paragraph 22). Save for such cases, the Court is, in principle, bound to give a preliminary ruling on questions concerning the interpretation of Community law (see *Bosman*, paragraph 59).

25 In the main proceedings, when the claimants contested the validity of Regulation No 261/2004 before the referring court the question arose for the latter as to whether that challenge to the regulation's validity warranted a reference to the Court for a preliminary ruling as provided in Article 234 EC. Accordingly, the interpretation of that article which the referring court seeks by means of the present question cannot be considered to bear no relation to the purpose of the main action. The fact that the referring court has at the same time also referred to the Court questions concerning the validity of Regulation No 261/2004 and that the answers which will be provided to them may dispose of the main proceedings cannot call into question the relevance which the question on the interpretation of Article 234 EC possesses in itself.

26 The question asked should therefore be answered.

Substance

27 It is settled case-law that national courts do not have the power to declare acts of the Community institutions invalid. The main purpose of the jurisdiction conferred on the Court by Article 234 EC is to ensure that Community law is applied uniformly by national courts. That requirement of uniformity is particularly vital where the validity of a Community act is in question. Differences between courts of the Member States as to the validity of Community acts would be liable to jeopardise the very unity of the Community legal order and undermine the fundamental requirement of legal certainty (Case 314/85 *Foto-Frost* [1987] ECR 4199, paragraph 15; Case C-27/95 *Bakers of Nailsea* [1997] ECR I-1847, paragraph 20; and Case C-461/03 *Gaston Schul Douane-expediteur* [2005] ECR I-0000, paragraph 21). The Court of Justice alone therefore has jurisdiction to declare a Community act invalid (Joined Cases C-143/88 and C-92/89 *Zuckerfabrik Süderdithmarschen and Zuckerfabrik Soest* [1991] ECR I-415, paragraph 17, and Case C-6/99 *Greenpeace France and Others* [2000] ECR I-1651, paragraph 54).

28 Article 234 EC does not constitute a means of redress available to the parties to a case pending before a national court and therefore the mere fact that a party contends that the dispute gives rise to a question concerning the validity of Community law does not mean that the court concerned is compelled to consider that a question has been raised within the meaning of Article 234 EC (see, to this effect, Case 283/81 *Cilfit* [1982] ECR 3415, paragraph 9). Accordingly, the fact that the validity of a Community act is contested before a national court is not in itself sufficient to warrant referral of a question to the Court for a preliminary ruling.

29 The Court has held that courts against whose decisions there is a judicial remedy under national law may examine the validity of a Community act and, if they consider that the arguments put forward before them by the parties in support of invalidity are unfounded, they may reject them, concluding that the act is completely valid. In so doing, they are not calling into question the existence of the Community act (*Foto-Frost*, paragraph 14).

30 On the other hand, where such a court considers that one or more arguments for invalidity, put forward by the parties or, as the case may be, raised by it of its own motion (see, to this effect, Case 126/80 *Salonia* [1981] ECR 1563, paragraph 7), are well founded, it is incumbent upon it to stay proceedings and to make a reference to the Court for a preliminary ruling on the act's validity.

31 In addition, the spirit of cooperation which must prevail in the operation of the preliminary reference procedure means that the national court is to set out in its order for reference the reasons why it considers such a reference to be necessary.

32 Consequently, the answer to the eighth question must be that, where a court against whose decisions there is a judicial remedy under national law considers that one or more arguments

for invalidity of a Community act which have been put forward by the parties or, as the case may be, raised by it of its own motion are well founded, it must stay proceedings and make a reference to the Court for a preliminary ruling on the act's validity .

The other questions

33 By its first seven questions, the referring court asks, in essence, whether Articles 5, 6 and 7 of Regulation No 261/2004 are invalid and, if relevant, whether their invalidity is liable to result in invalidity of that regulation as a whole.

The consistency of Article 6 of Regulation No 261/2004 with the Montreal Convention

34 By its first question, the referring court essentially asks whether Article 6 of Regulation No 261/2004 is inconsistent with Articles 19, 22 and 29 of the Montreal Convention.

35 Article 300(7) EC provides that 'agreements concluded under the conditions set out in this Article shall be binding on the institutions of the Community and on Member States'. In accordance with the Court's case-law, those agreements prevail over provisions of secondary Community legislation (Case C-61/94 *Commission* v *Germany* [1996] ECR I-3989, paragraph 52, and Case C-286/02 *Bellio F.lli* [2004] ECR I-3465, paragraph 33).

36 The Montreal Convention, signed by the Community on 9 December 1999 on the basis of Article 300(2) EC, was approved by Council decision of 5 April 2001 and entered into force, so far as concerns the Community, on 28 June 2004. Therefore from that last date the provisions of that Convention have, in accordance with settled case-law, been an integral part of the Community legal order (Case 181/73 *Haegeman* [1974] ECR 449, paragraph 5, and Case 12/86 *Demirel* [1987] ECR 3719, paragraph 7). It was after that date that, by decision of 14 July 2004, the High Court of Justice made the present order for reference in the judicial review proceedings before it.

37 Article 6 of Regulation No 261/2004 provides that, in the event of a long delay to a flight, the operating air carrier must offer to assist and take care of the passengers concerned. It does not provide that the carrier may escape such obligations in the event of extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken.

38 IATA and ELFAA submitted in their applications to the referring court and submit before this Court that Article 6 of Regulation No 261/2004 is accordingly incompatible with the Montreal Convention which contains, in Articles 19 and 22(1), clauses excluding and limiting the air carrier's liability in the event of delay in the carriage of passengers and which provides, in Article 29, that any action for damages, however founded, can only be brought subject to the conditions and limits set out in the Convention.

39 As to those submissions, Articles 19, 22 and 29 of the Montreal Convention are among the rules in the light of which the Court reviews the legality of acts of the Community institutions since, first, neither the nature nor the broad logic of the Convention precludes this and, second, those three articles appear, as regards their content, to be unconditional and sufficiently precise.

40 It is to be noted with regard to the interpretation of those articles that, in accordance with settled case-law, an international treaty must be interpreted by reference to the terms in which it is worded and in the light of its objectives. Article 31 of the Vienna Convention of 23 May 1969 on the Law of Treaties and Article 31 of the Vienna Convention of 21 March 1986 on the Law of Treaties between States and International Organisations or between International Organisations, which express, to this effect, general customary international law, state that a treaty is to be interpreted in good faith in accordance with the ordinary meaning to be given to its terms in their context and in the light of its object and purpose (see, to this effect, Case C-268/99 *Jany and Others* [2001] ECR I-8615, paragraph 35).

41 It is clear from the preamble to the Montreal Convention that the States party thereto recognised 'the importance of ensuring protection of the interests of consumers in international carriage by air and the need for equitable compensation based on the principle of restitution'. It is therefore in the light of this objective that the scope which the authors of the Convention intended to give to Articles 19, 22 and 29 is to be assessed.

42 It is apparent from those provisions of the Montreal Convention, which are contained in Chapter III headed 'Liability of the carrier and extent of compensation for damage', that they lay down the conditions under which any actions for damages against air carriers may be brought by passengers who invoke damage sustained because of delay. They limit the carrier's liability to 4 150 SDRs for each passenger.

43 Any delay in the carriage of passengers by air, and in particular a long delay, may, generally speaking, cause two types of damage. First, excessive delay will cause damage that is almost identical for every passenger, redress for which may take the form of standardised and immediate assistance or care for everybody concerned, through the provision, for example, of refreshments, meals and accommodation and of the opportunity to make telephone calls. Second, passengers are liable to suffer individual damage, inherent in the reason for travelling, redress for which requires a case-by-case assessment of the extent of the damage caused and can consequently only be the subject of compensation granted subsequently on an individual basis.

44 It is clear from Articles 19, 22 and 29 of the Montreal Convention that they merely govern the conditions under which, after a flight has been delayed, the passengers concerned may bring actions for damages by way of redress on an individual basis, that is to say for compensation, from the carriers liable for damage resulting from that delay.

45 It does not follow from these provisions, or from any other provision of the Montreal Convention, that the authors of the Convention intended to shield those carriers from any other form of intervention, in particular action which could be envisaged by the public authorities to redress, in a standardised and immediate manner, the damage that is constituted by the inconvenience that delay in the carriage of passengers by air causes, without the passengers having to suffer the inconvenience inherent in the bringing of actions for damages before the courts.

46 The Montreal Convention could not therefore prevent the action taken by the Community legislature to lay down, in exercise of the powers conferred on the Community in the fields of transport and consumer protection, the conditions under which damage linked to the abovementioned inconvenience should be redressed. Since the assistance and taking care of passengers envisaged by Article 6 of Regulation No 261/2004 in the event of a long delay to a flight constitute such standardised and immediate compensatory measures, they are not among those whose institution is regulated by the Convention. The system prescribed in Article 6 simply operates at an earlier stage than the system which results from the Montreal Convention.

47 The standardised and immediate assistance and care measures do not themselves prevent the passengers concerned, should the same delay also cause them damage conferring entitlement to compensation, from being able to bring in addition actions to redress that damage under the conditions laid down by the Montreal Convention.

48 Those measures, which enhance the protection afforded to passengers' interests and improve the conditions under which the principle of restitution is applicable to passengers, cannot therefore be considered inconsistent with the Montreal Convention.

The validity of Article 5 of Regulation No 261/2004 in the light of Article 251 EC

49 By its second question, the referring court essentially asks whether, in amending Article 5 of the draft at the origin of Regulation No 261/2004, as resulting from Common Position (EC) No 27/2003 of 18 March 2003 (OJ 2003 C 125 E, p. 63) ('the draft regulation'), the Conciliation

Committee provided for in Article 251 EC complied with the procedural requirements which that article entails.

50 It is necessary, first of all, to set out the context in which the Conciliation Committee acted in the procedure for adoption of Regulation No 261/2004, having regard in particular to the concerns of the Community legislature relating to whether or not account was to be taken of circumstances allowing air carriers to be exempted from their obligations to take care of and assist passengers in the event of cancellation of, or a long delay to, a flight.

51 In Common Position No 27/2003, the Council decided that air carriers could be exempted from their compensation and care obligations imposed, in the event of cancellation of flights, by Article 5 of the draft regulation and from their care obligations imposed, in the event of a long delay, by Article 6 of that draft, if they could prove that the cancellation or delay was caused by extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken.

52 When the Parliament considered that common position on 3 July 2003, at second reading, it did not propose any amendment to Article 5 of the draft regulation. On the other hand, it adopted, inter alia, Amendment 11 on Article 6 of the draft, in particular removing all reference to the exemption clause relating to extraordinary circumstances ('the extraordinary circumstances defence').

53 By letter of 22 September 2003 the Council gave notice that it was unable to approve all the Parliament's amendments, and the President of the Council, in agreement with the President of the Parliament, convened a meeting of the Conciliation Committee.

54 At its meeting of 14 October 2003, the Conciliation Committee reached agreement on a joint text, approved on 1 December 2003, under which, in particular, all reference in Article 5 of the draft regulation to the extraordinary circumstances defence allowing air carriers to be exempted from their care obligations in the event of flight cancellations was removed. The regulation was adopted, in accordance with the joint text of the Conciliation Committee, by the Parliament at third reading, on 18 December 2003, and by the Council, on 26 January 2004.

55 The claimants in the main proceedings contend that, in amending Article 5 of the draft regulation when no amendment had been made to that article by the Parliament at second reading, the Conciliation Committee exceeded the powers conferred upon it by Article 251 EC.

56 In the co-decision procedure, the Conciliation Committee is convened if the Council does not agree to the amendments proposed by the Parliament at second reading. It is common ground that there was such a disagreement in the procedure for adoption of Regulation No 261/2004, justifying the convening of the Conciliation Committee.

57 Contrary to IATA's submissions, once the Conciliation Committee has been convened, it has the task not of coming to an agreement on the amendments proposed by the Parliament but, as is clear from the very wording of Article 251 EC, 'of reaching agreement on a joint text', by addressing, on the basis of the amendments proposed by the Parliament, the common position adopted by the Council. The wording of Article 251 EC does not therefore itself include any restriction as to the content of the measures chosen that enable agreement to be reached on a joint text.

58 In using the term 'conciliation', the authors of the Treaty intended to make the procedure adopted effective and to confer a wide discretion on the Conciliation Committee. In adopting such a method for resolving disagreements, their very aim was that the points of view of the Parliament and the Council should be reconciled on the basis of examination of all the aspects of the disagreement, and with the active participation in the Conciliation Committee's proceedings of the Commission of the European Communities, which has the task of taking 'all the necessary initiatives with a view to reconciling the positions of the … Parliament and the Council'.

59 In this light, taking account of the power to mediate thus conferred on the Commission and of the freedom which the Parliament and the Council finally have as to whether or not to accept the joint text approved by the Conciliation Committee, Article 251 EC cannot be read as limiting on principle the power of that committee. The mere fact that, in the present case, Article 5 of the draft regulation was not amended by the Parliament at second reading does not show that the committee exceeded the powers conferred upon it by Article 251 EC.

60 The claimants in the main proceedings further contend that, since meetings of the Conciliation Committee are not public in nature, the principles of representative democracy are undermined.

61 It is true that genuine participation of the Parliament in the legislative process of the Community, in accordance with the procedures laid down by the Treaty, represents an essential factor in the institutional balance intended by the Treaty. However, it is not in dispute that the Parliament is itself represented on the Conciliation Committee and that this representation is indeed made up in accordance with the relative size of each political group in the Parliament. Furthermore, under Article 251(5) EC the joint text adopted by the Conciliation Committee must still be examined by the Parliament itself with a view to its approval. This examination, which necessarily takes place in the conditions of transparency normal for the proceedings of that assembly, thus ensures in any event the genuine participation of the Parliament in the legislative process in compliance with the principles of representative democracy.

62 It should be noted, having regard to the documents before the Court, that in the present case the disagreement brought before the Conciliation Committee related in particular to whether or not air carriers could rely on the extraordinary circumstances defence in order to be exempted from their obligations to assist and take care of passengers, imposed by Article 6 of the draft regulation, in the event of a long delay to a flight. The Conciliation Committee reached an agreement under which all reference to the extraordinary circumstances defence was removed from Article 6 of the draft, in order to ensure that passengers were taken care of and assisted immediately whatever the cause of the flight delay. The committee then also agreed, in order to ensure a coherent and symmetrical approach, to remove from Article 5 of the draft the same reference, with regard to obligations to take care of passengers in the event of cancellation of a flight.

63 Accordingly, the Conciliation Committee did not exceed the limits of its powers in amending Article 5 of the draft regulation.

The obligation to state reasons and observance of the principle of legal certainty

64 By its third and fourth questions, the referring court essentially asks whether Articles 5 and 6 of Regulation No 261/2004 are invalid in that they are inconsistent with the principle of legal certainty or do not satisfy the obligation to state reasons. By its seventh question, it also enquires whether Article 7 of the regulation complies with that obligation.

65 The claimants in the main proceedings plead that the contested regulation contains ambiguities, gaps and contradictions which affect its legality having regard to both the obligation to state reasons and observance of the principle of legal certainty.

66 It is to be remembered that, while the statement of reasons required by Article 253 EC must show clearly and unequivocally the reasoning of the Community authority which adopted the contested measure, so as to enable the persons concerned to ascertain the reasons for the measure and to enable the Court to exercise its powers of review, it is not required to go into every relevant point of fact and law (see, inter alia, Case C-122/94 *Commission* v *Council* [1996] ECR I-881, paragraph 29; Case C-210/03 *Swedish Match* [2004] ECR I-11893, paragraph 63; and Joined Cases C-154/04 and C-155/04 *Alliance for Natural Health and Others* [2005] ECR I-0000, paragraph 133).

67 In addition, the question whether a statement of reasons satisfies the requirements must be

assessed with reference not only to the wording of the measure but also to its context and to the whole body of legal rules governing the matter in question. In the case of a measure intended to have general application, as in the main proceedings, the preamble may be limited to indicating the general situation which led to its adoption, on the one hand, and the general objectives which it is intended to achieve, on the other (see, inter alia, Case C-342/03 *Spain* v *Council* [2005] ECR I-1975, paragraph 55). If the contested measure clearly discloses the essential objective pursued by the institutions, it would be excessive to require a specific statement of reasons for each of the technical choices made by them (see, inter alia, Case C-100/99 *Italy* v *Council andCommission* [2001] ECR I-5217, paragraph 64, and *Alliance for Natural Health*, paragraph 134).

68 The principle of legal certainty is a fundamental principle of Community law which requires, in particular, that rules should be clear and precise, so that individuals may ascertain unequivocally what their rights and obligations are and may take steps accordingly (see Case 169/80 *Gondrand Frèresand Garancini* [1981] ECR 1931; Case C-143/93 *Van Es Douane Agenten* [1996] ECR I-431, paragraph 27; and Case C-110/03 *Belgium* v *Commission* [2005] ECR I-2801, paragraph 30).

69 In light of the case-law cited above, it must be stated, first, that Articles 5 and 6 of Regulation No 261/2004 lay down precisely and clearly the obligations owed by an operating air carrier in the event of cancellation of, or a long delay to, a flight. The objective of those provisions is apparent, with equal clarity, from the first and second recitals in the preamble to the regulation, according to which action by the Community in the field of air transport should aim, among other things, at ensuring a high level of protection for passengers and take account of the requirements of consumer protection in general, inasmuch as cancellation of, or long delay to, flights causes serious inconvenience to passengers.

70 Furthermore, the 12th and 13th recitals in the preamble to the regulation state that passengers whose flights are cancelled should be able to obtain compensation if they are not informed in good time of the cancellation, be able either to obtain reimbursement of their tickets or to obtain re-routing under satisfactory conditions, and be adequately cared for while awaiting a later flight. The 17th recital states that passengers whose flights are delayed for a specified time should be adequately cared for and should be able to cancel their flights with reimbursement of their tickets or to continue them under satisfactory conditions. These details thus clearly disclose the essential objective pursued.

71 It is also not in dispute that the various kinds of damage suffered by passengers in the event of cancellation of, or a long delay to, a flight exist. It has not been established, nor indeed has it been asserted, that incidents of this nature amount to no more than an insignificant phenomenon. Neither Article 253 EC nor any other provision indicates that, in order for the Community measure at issue to be valid, it would have to contain precise figures justifying the need for action on the part of the Community legislature.

72 Nor can Regulation No 261/2004 be required to contain a specific statement of reasons for each of the technical choices made. Since the objective of protecting passengers required acceptance of standardised and effective compensatory measures which could not give rise to discussion at the very moment when they were to be applied, a situation which, quite evidently, the extraordinary circumstances defence would not have failed to bring about, the Community legislature was able, without breaching its obligation to state reasons, to refrain from setting out the reasons why it considered that operating air carriers could not rely on such a defence in order to be exempted from their obligations laid down in Articles 5 and 6 of the regulation. Likewise, contrary to ELFAA's submissions, the Community legislature was able, without rendering the act in question unlawful, to lay down in Article 7 the principle that fixed compensation was payable in the event of cancellation of a flight and the amount of the compensation without setting out the reasons why it had chosen that measure and that amount.

73 Second, the standardised and immediate measures laid down in Article 6 of Regulation No 261/2004 are not among those whose institution is regulated by the Montreal Convention, and

are not inconsistent with that Convention. It follows that the provisions of Regulation No 261/2004 governing in this way certain rights of passengers in the event of long delays to flights were capable of being made subject to conditions different from those laid down by the Convention with regard to other rights. Accordingly, they are not in any way contrary to the provisions which are contained in Regulation No 2027/97 and were adopted, in accordance with Article 1 thereof, in order to implement the relevant provisions of the Montreal Convention.

74 In those circumstances, the claimants in the main proceedings cannot maintain that, by not referring to Regulation No 2027/97, Regulation No 261/2004 was adopted in breach of the obligation to state reasons. Nor can Article 6 of Regulation No 261/2004 be read as having, in breach of the principle of legal certainty, denied the undertakings represented by the claimants in the main proceedings the ability to ascertain unequivocally the obligations owed by them as a consequence of the system resulting from Regulation No 2027/97.

75 Third, the claimants in the main proceedings submit that Regulation No 261/2004 envisages, in an inconsistent manner in the 14th and 15th recitals in its preamble, that extraordinary circumstances may limit or exclude an operating air carrier's liability in the event of cancellation of, or long delays to, flights whereas Articles 5 and 6 of the regulation, which govern its obligations in such a case, do not accept such a defence to liability except with regard to the obligation to pay compensation.

76 However, it must be stated with regard to those submissions, first, that while the preamble to a Community measure may explain the latter's content (see *Alliance for Natural Health*, paragraph 91), it cannot be relied upon as a ground for derogating from the actual provisions of the measure in question (Case C-162/97 *Nilsson andOthers* [1998] ECR I-7477, paragraph 54, and Case C-136/04 *DeutschesMilch-Kontor* [2005] ECR I-0000, paragraph 32). Second, the wording of those recitals indeed gives the impression that, generally, operating air carriers should be released from all their obligations in the event of extraordinary circumstances, and it accordingly gives rise to a certain ambiguity between the intention thus expressed by the Community legislature and the actual content of Articles 5 and 6 of Regulation No 261/2004 which do not make this defence to liability so general in character. However, such an ambiguity does not extend so far as to render incoherent the system set up by those two articles, which are themselves entirely unambiguous.

77 It follows from the foregoing considerations that Articles 5, 6 and 7 of Regulation No 261/2004 are not invalid by reason of breach of the principle of legal certainty or of the obligation to state reasons.

Observance of the principle of proportionality

78 By its fifth and seventh questions, the referring court asks, in essence, whether Articles 5, 6 and 7 of Regulation No 261/2004 are invalid by reason of an infringement of the principle of proportionality.

79 The principle of proportionality, which is one of the general principles of Community law, requires that measures implemented through Community provisions should be appropriate for attaining the objective pursued and must not go beyond what is necessary to achieve it (see, inter alia, Case C-210/00 *KäsereiChampignon Hofmeister* [2002] ECR I-6453, paragraph 59; Case C-491/01 *British American Tobacco (Investments) and Imperial Tobacco* [2002] ECR I-11453, paragraph 122; and *SwedishMatch*, paragraph 47).

80 With regard to judicial review of the conditions referred to in the previous paragraph, the Community legislature must be allowed a broad discretion in areas which involve political, economic and social choices on its part, and in which it is called upon to undertake complex assessments. Consequently, the legality of a measure adopted in those fields can be affected only if the measure is manifestly inappropriate having regard to the objective which the competent institution is seeking to pursue (see, to this effect, Case C-84/94 *United Kingdom* v *Council* [1996] ECR I-5755, paragraph 58; Case C-233/94 *Germany* v *Parliament and Council*

[1997] ECR I-2405, paragraphs 55 and 56; Case C-157/96 *National Farmers' Union and Others* [1998] ECR I-2211, paragraph 61; and *British American Tobacco (Investments) and Imperial Tobacco*, paragraph 123). That is so, in particular, in the field of the common transport policy (see, to this effect, in particular, Joined Cases C-248/95 and C-249/95 *SAM Schiffahrt and Stapf* [1997] ECR I-4475, paragraph 23, and Joined Cases C-27/00 and C-122/00 *Omega Air and Others* [2002] ECR I-2569, paragraph 63).

81 The claimants in the main proceedings submit that the measures to assist, care for and compensate passengers that are prescribed by Articles 5, 6 and 7 of Regulation No 261/2004 in the event of cancellation of, or a long delay to, a flight do not enable the objective of reducing such instances of cancellation or delay to be achieved and are in any event, by reason of the considerable financial charges which they will impose on Community air carriers, totally disproportionate to the objective pursued.

82 In assessing whether the measures in question are necessary, it should be noted that the immediate objective pursued by the Community legislature, as apparent from the first four recitals in the preamble to Regulation No 261/2004, is to strengthen protection for passengers who suffer cancellation of, or long delays to, flights, by redressing, in an immediate and standardised manner, certain damage caused to passengers placed in such circumstances.

83 Admittedly, in addition to this direct objective explicitly set out by the Community legislature, the regulation, like any other generally applicable legislation, may implicitly involve other, secondary, objectives such as, as the claimants in the main proceedings submit, that of reducing, through preventive action, the number of flights that are cancelled or subject to a long delay. The Court has the task of assessing first of all whether the measures adopted are manifestly inappropriate in the light of the regulation's explicit objective, that relating to strengthening protection for passengers, the legitimacy of which is not in itself contested.

84 It must be stated, first, that the measures prescribed by Articles 5 and 6 of Regulation No 261/2004 are in themselves capable of immediately redressing some of the damage suffered by passengers in the event of cancellation of, or a long delay to, a flight and therefore enable a high level of passenger protection, sought by the regulation, to be ensured.

85 Second, it is not in dispute that the extent of the various measures chosen by the Community legislature varies according to the significance of the damage suffered by the passengers, its significance being assessed by reference either to the length of the delay and the wait for the next flight or to the time taken to inform them of the flight's cancellation. The criteria thus adopted for determining the passengers' entitlement to those measures do not therefore appear in any way unrelated to the requirement for proportionality.

86 Third, the standardised and immediate compensatory measures such as the re-routing of passengers, the supply of refreshments, meals or accommodation or the making available of means of communication with third parties are designed to cater for passengers' immediate needs on the spot, whatever the cause of the flight's cancellation or delay. Given that these measures vary, as stated in the previous paragraph of this judgment, according to the significance of the damage suffered by the passengers, they likewise do not appear to be manifestly inappropriate merely because carriers cannot rely on the extraordinary circumstances defence.

87 Fourth, it has not been established that if, as advocated by ELFAA, passengers were to take out voluntary insurance to cover the risks inherent in flight delays and cancellations, that would in any event make it possible to remedy the damage suffered by passengers on the spot. Such a measure cannot, therefore, be regarded as being more appropriate to the objective pursued than those chosen by the Community legislature.

88 Fifth, the harmful consequences to which a delay gives rise and which Regulation No 261/2004 seeks to remedy are in no way related to the price paid for a ticket. Therefore, the argument that the measures chosen to alleviate those consequences should have been determined in

proportion to the cost of the ticket cannot be upheld.

89 Sixth, while IATA and ELFAA contend that the abovementioned measures could well have significant consequences for carriers' financial burdens and are not appropriate to the regulation's secondary objective of reducing the number of flights that are cancelled or subject to a long delay, it must be stated that figures on the frequency of those delays and cancellations have not been given in the proceedings before the Court. Accordingly, the theoretical costs which those measures involve for airlines, as put forward by the parties concerned, do not in any event enable it to be regarded as established that those effects would be out of proportion to the interest in the measures.

90 Moreover, the discharge of obligations pursuant to Regulation No 261/2004 is without prejudice to air carrier's rights to seek compensation from any person, including third parties, in accordance with national law, as Article 13 of the regulation provides. Such compensation accordingly may reduce or even remove the financial burden borne by the carriers in consequence of those obligations. Nor does it appear unreasonable for those obligations initially to be borne, subject to the abovementioned right to compensation, by the air carriers with which the passengers concerned have a contract of carriage that entitles them to a flight that should be neither cancelled nor delayed.

91 Seventh, so far as concerns the compensation prescribed in Article 7 of Regulation No 261/2004, which passengers may claim by virtue of Article 5 when they have been informed of a flight cancellation too late, air carriers can be exempted from payment of that compensation if they prove that the cancellation was caused by extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken. Given the existence of such a ground for exemption and of the conditions restricting the application of this obligation to which air carriers are not subject if the information is provided sufficiently early or accompanied by offers of re-routing, the obligation does not appear manifestly inappropriate to the objective pursued. Furthermore, the amount of the compensation, set at EUR 250, 400 or 600 depending on the distance of the flights concerned, likewise does not appear excessive and indeed, as maintained by the Commission in its observations without being contradicted, essentially amounts to an update of the level of compensation laid down by Council Regulation (EEC) No 295/91 of 4 February 1991 establishing common rules for a denied-boarding compensation system in scheduled air transport (OJ 1991 L 36, p. 5), taking account of inflation since its entry into force.

92 It follows from the foregoing considerations that Articles 5, 6 and 7 of Regulation No 261/2004 are not invalid by reason of infringement of the principle of proportionality.

Observance of the principle of equal treatment

93 By its sixth and seventh questions, the referring court asks, in essence, whether Articles 5, 6 and 7 of Regulation No 261/2004 are invalid by reason of an infringement of the principle of equal treatment.

94 ELFAA submits that the low-fare airlines which it represents suffer discriminatory treatment since the measures prescribed in those articles impose the same obligations on all air carriers without distinction on the basis of their pricing policies and the services that they offer. Furthermore, Community law does not impose the same obligations on other means of transport.

95 It is settled case-law that the principle of equal treatment or non-discrimination requires that comparable situations must not be treated differently and that different situations must not be treated in the same way unless such treatment is objectively justified (*Swedish Match*, paragraph 70).

96 First, having regard in particular to the manner in which they operate, the conditions governing their accessibility and the distribution of their networks, different modes of transport are not

interchangeable as regards the conditions of their use (see, to this effect, *SAM Schiffahrt and Stapf*, paragraph 34). The situation of undertakings operating in each of those different transport sectors is accordingly not comparable.

97 Second, with regard to air transport, passengers whose flights are cancelled or subject to a long delay are in an objectively different situation from that experienced by passengers on other means of transport in the event of incidents of the same nature. Because, in particular, of the location of airports, which are generally outside urban centres, and of the particular procedures for checking-in and reclaiming baggage, the inconvenience suffered by passengers when such incidents occur is not comparable.

98 Finally, the damage suffered by passengers of air carriers in the event of cancellation of, or a long delay to, a flight is similar whatever the airline with which they have a contract and is unrelated to the pricing policies operated by the airline. Accordingly, if the Community legislature was not to infringe the principle of equality, having regard to the aim pursued by Regulation No 261/2004 of increasing protection for all passengers of air carriers, it was incumbent upon it to treat all airlines identically.

99 It follows that Articles 5, 6 and 7 of Regulation No 261/2004 are not invalid by reason of a breach of the principle of equal treatment.

100 In view of all the foregoing considerations, the answer to the first seven questions referred to the Court must be that examination thereof has revealed no factor of such a kind as to affect the validity of Articles 5, 6 and 7 of Regulation No 261/2004.

Costs

101 Since these proceedings are, for the parties to the main proceedings, a step in the proceedings pending before the referring court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

1. **Where a court against whose decisions there is a judicial remedy under national law considers that one or more arguments for invalidity of a Community act which have been put forward by the parties or, as the case may be, raised by it of its own motion are well founded, it must stay proceedings and make a reference to the Court of Justice for a preliminary ruling on the act's validity.**

2. **Examination of the questions referred to the Court has revealed no factor of such a kind as to affect the validity of Articles 5, 6 and 7 of Regulation (EC) No 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) No 295/91.**

[Signatures]

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* Language of the case: English.

Case C-221/04

Commission of the European Communities

v

Kingdom of Spain

(Failure by a Member State to fulfil obligations – Directive 92/43/EEC – Conservation of natural habitats and of wild fauna and flora – Protection of species – Hunting using stopped snares in private hunting areas – Castilla y León)

Summary of the Judgment

1. *Actions for failure to fulfil obligations – Examination of merits by the Court – Situation to be taken into consideration – Situation on expiry of the period laid down in the reasoned opinion*

   (Art. 226, second para. EC)

2. *Actions for failure to fulfil obligations – Subject-matter of the dispute – Determination during the procedure prior to the action*

   (Art. 226 EC)

3. *Actions for failure to fulfil obligations – Proof of failure – Burden of proof on Commission*

   (Art. 226 EC; Council Directive 92/43)

4. *Environment – Conservation of natural habitats and of wild fauna and flora – Directive 92/43*

   (Council Directive 92/43, Art. 12(1))

1. Under the second paragraph of Article 226 EC, an action for failure to fulfil obligations can be brought before the Court only if the Member State concerned has failed to comply with the reasoned opinion within the period laid down by the Commission for that purpose.

   Furthermore, the question whether a Member State has failed to fulfil its obligations must be determined by reference to the situation prevailing in the Member State at the end of the period laid down in the reasoned opinion.

   (see paras 22-23)

2. In an action for failure to fulfil obligations, the purpose of the pre-litigation procedure is to give the State concerned the opportunity, on the one hand, to comply with its obligations under Community law and, on the other hand, to avail itself of its right to defend itself against the complaints formulated by the Commission.

   Therefore, in its action for failure to fulfil obligations, the Commission is permitted to limit the subject-matter of the proceedings. Even though the aim of letter of formal notice is to delimit the subject-matter of the dispute and the Commission is obliged to specify precisely in the reasoned opinion the grounds of complaint which it has already raised more generally in the letter of formal notice, that does not, however, prevent it, at the stage of the proceedings before the Court, from restricting the subject-matter of the

dispute or expanding it to cover subsequent measures that are essentially the same as the measures challenged in the formal notice.

(see paras 33, 36-37)

3. In an action for failure to fulfil obligations brought under Article 226 EC it is for the Commission to prove that the obligation has not been fulfilled without being able to rely on any presumption.

Thus, it is for the Commission, in the context of a failure to fulfil obligations relating to Directive 92/43 on the conservation of natural habitats and of wild fauna and flora, to adduce proof of the presence of the protected animal species in the area concerned and not only evidence which proves at the very most that there is a possibility that they are to be found in that area.

(see paras 59, 63)

4. A Member State fails to fulfil its obligations under Article 12(1)(b) and (d) of Directive 92/43 on the conservation of natural habitats and of wild fauna and flora where it does not take all the requisite specific measures to prevent the deliberate disturbance of the animal species concerned during its breeding period or the deterioration or destruction of its breeding sites.

The condition as to 'deliberate' action in Article 12(1)(a) of Directive 92/43 is met where it is proven that the author of the act intended the capture or killing of a specimen belonging to a protected animal species or, at the very least, accepted the possibility of such capture or killing.

It follows that a Member State does not fail to fulfil those obligations if it permits the hunting of an animal species which is different from those protected by the directive.

(see paras 70-72)

JUDGMENT OF THE COURT (Second Chamber)

18 May 2006 (*)

(Failure by a Member State to fulfil obligations – Directive 92/43/EEC – Conservation of natural habitats and of wild fauna and flora – Protection of species – Hunting using stopped snares in private hunting areas – Castilla y León)

In Case C-221/04,

ACTION under Article 226 EC for failure to fulfil obligations, brought on 27 May 2004,

Commission of the European Communities, represented by G. Valero Jordana and M. van Beek, acting as Agents, with an address for service in Luxembourg,

applicant,

v

Kingdom of Spain, represented by F. Díez Moreno, acting as Agent, with an address for service in Luxembourg,

defendant,

THE COURT (Second Chamber),

composed of C.W.A. Timmermans, President of the Chamber, J. Makarczyk, R. Schintgen, P. Kūris (Rapporteur) and G. Arestis, Judges,

Advocate General: J. Kokott,

Registrar: M. Ferreira, Principal Administrator,

having regard to the written procedure and further to the hearing on 1 December 2005,

after hearing the Opinion of the Advocate General at the sitting on 15 December 2005,

gives the following

Judgment

1 By its application, the Commission of the European Communities asks the Court for a declaration that, owing to the authorisation by the authorities in Castilla y Léon of the setting of stopped snares in several private hunting areas, the Kingdom of Spain has failed to fulfil its obligations under Article 12(1) of and Annex VI to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ 1992 L 206, p. 7) ('the directive').

Legal context

2 The aim of the directive, according to Article 2(1) thereof, is 'to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies'.

3 Article 12(1) of the directive provides that:

'Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) in their natural range, prohibiting:

(a) all forms of deliberate capture or killing of specimens of these species in the wild;

…'

4 Annex IV to the directive, entitled 'Animal and plant species of Community interest in need of strict protection', cites *Lutra lutra* ('the otter') under (a), 'Animals'.

5 Annex VI to the directive, entitled 'Prohibited methods and means of capture and killing and modes of transport', mentions, as regards mammals, '[t]raps which are non-selective according to their principle or their conditions of use' under (a), 'Non-selective means'.

6 Article 15 of the directive provides that:

'In respect of the capture or killing of species of wild fauna listed in Annex V(a) and in cases where, in accordance with Article 16, derogations are applied to the taking, capture or killing of species listed in Annex IV(a), Member States shall prohibit the use of all indiscriminate means capable of causing local disappearance of, or serious disturbance to, populations of such species, and in particular:

(a) use of the means of capture and killing listed in Annex VI(a);

…'

7 Article 16 of the directive provides that:

'1. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15(a) and (b):

…

(b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;

…'

Facts and pre-litigation procedure

8 On 19 April 2001, following a complaint registered in 2000, the Commission sent the Kingdom of Spain a letter of formal notice in which it maintained that that Member State had failed to fulfil its obligations under Article 12(1) of and Annex VI to the directive by authorising the setting of stopped snares in a hunting area in which some of the animal species referred to in Annexes II and IV to that directive are to be found. The Spanish authorities replied by means of a detailed letter of 29 June 2001.

9 Having received two new complaints concerning permits for setting stopped snares in the course of 2001, the Commission, on 21 December 2001, sent a supplementary letter of formal notice to the Spanish authorities, who replied by letter of 25 February 2002.

10 As it considered that the infringements of the directive were persisting, the Commission sent the Kingdom of Spain a reasoned opinion on 3 April 2003 concerning the grant by the Spanish authorities of permits to set stopped snares, which do not constitute a selective hunting method, on various hunting grounds. It requested that that Member State take the measures necessary to comply with that opinion within two months of its notification.

11 In its letter of reply of 15 July 2003, the Spanish Government stated that the Commission had contravened the provisions of Article 226 EC by mentioning in the reasoned opinion a permit of 13 December 2002 which had not been cited either in the initial letter of formal notice or in the supplementary letter of formal notice. Moreover, that government again contested the grounds of complaint put forward by the Commission.

12 As it took the view that the Kingdom of Spain was still failing to fulfil some of the obligations stemming from the directive, the Commission brought this action.

13 The action relates to three permits for the use of stopped snares for fox hunting issued by the authorities of Castilla y Léon on 10 January 2000, 24 May 2001 and 13 December 2002 ('the contested permits'). The contested permits relate to two hunting areas ('the areas concerned'), namely the AV-10.198 area situated in the territory of the municipality of Mediana de la Voltoya in the province of Ávila which is referred to in the permit of 24 May 2001 and the SA-10.328 area

situated in the territory of the municipality of Aldeanueva de la Sierra in the province of Salamanca which is referred to in the permits of 10 January 2000 and 13 December 2002.

Admissibility of the action

14 The Spanish Government raises two pleas of inadmissibility. The first concerns alteration of the subject-matter of the application and in the alternative its lack of precision and the second relates to the insufficient statement of grounds in the application.

The plea of inadmissibility concerning alteration of the subject-matter of the application

15 The Spanish Government submits principally that the Commission altered the subject-matter of the application following its submission by alleging that the directive was incorrectly transposed although in earlier correspondence it had restricted itself to alleging that the Kingdom of Spain had infringed the directive by issuing the contested permits.

16 According to the Commission that claim is incorrect as the action for failure to fulfil obligations has the sole aim of challenging the permits.

17 It is clear from the documents in the file that the debate regarding the incorrect transposition of the directive has its origin in the position taken by the Spanish Government in its defence which consisted of justifying the contested permits with regard to the derogations provided for in the directive.

18 The subject-matter of this action is clearly not the possible incorrect transposition into Spanish law of that directive, but the alleged infringement thereof by the grant of the contested permits. Accordingly, that plea of inadmissibility, as set out in the principal argument, must be rejected.

19 In the alternative, the Spanish Government submits that the Commission did not define the subject-matter of the action sufficiently. In that regard, the Spanish Government puts forward five arguments.

20 By its first argument, the Spanish Government objects to the expansion of the subject-matter of the application to include the permits of 24 May 2001 and 13 December 2002. On the one hand, the permit of 24 May 2001 was revoked by the competent authorities on 29 May 2001 and consequently has no legal force or status. On the other hand, the permit of 13 December 2002 was mentioned for the first time in the reasoned opinion so that that government did not have an opportunity to make observations.

21 The Commission contends first of all that the Spanish Government has not proved that the permit of 24 May 2001 was revoked. According to the Commission that permit shows the continuing existence of the administrative practice of issuing permits for hunting using stopped snares in hunting areas in which otters are to be found and should, on that basis, be taken into account in spite of the fact that it was granted only for a very brief period. As regards the permit of 13 December 2002, it was applied for and granted as an extension to the permit of 10 January 2000.

22 It must be borne in mind that it follows from the express terms of the second paragraph of Article 226 EC that the Commission may bring an action for failure to fulfil obligations before the Court only if the Member State concerned has failed to comply with the reasoned opinion within the period laid down by the Commission for that purpose (see, inter alia, Case C-362/90 *Commission* v *Italy* [1992] ECR I-2353, paragraph 9, and Case C-525/03 *Commission* v *Italy* [2005] I-9405, paragraph 13).

23 It is, furthermore, settled case-law that the question whether a Member State has failed to fulfil its obligations must be determined by reference to the situation prevailing in the Member State at the end of the period laid down in the reasoned opinion (see, inter alia, Case C-362/90

Commission v *Italy*, paragraph 10; Case C-173/01 *Commission* v *Greece* [2002] ECR I-6129, paragraph 7; Case C-114/02 *Commission* v *France* [2003] ECR I-3783, paragraph 9; and Case C-525/03 *Commission* v *Italy*, paragraph 14).

24 In the present case, it appears that the permit of 24 May 2001 was granted for a limited period ending on 15 June 2001, that is to say well before the reasoned opinion was sent.

25 It has not been shown that that permit continued to produce legal effects after the expiry of the period laid down in the reasoned opinion.

26 It follows that the action is inadmissible in so far as it relates to the permit issued on 24 May 2001.

27 As regards the permit of 13 December 2002, it must be noted that it was granted as an extension to the permit of 10 January 2000.

28 In that regard, it must be borne in mind that, according to the settled case-law of the Court, the subject-matter of a dispute may be extended to events which took place after the reasoned opinion was delivered in so far as they are of the same kind and constitute the same conduct as the events to which the opinion referred (see to that effect Case 42/82 *Commission* v *France* [1983] ECR 1013, paragraph 20, and Case 113/86 *Commission* v *Italy* [1988] ECR 607, paragraph 11).

29 In the present case, it must be noted that the permit of 13 December 2002 is of the same kind as the permit of 10 January 2000, as it states the conditions applicable under the latter for using and setting stopped snares without altering the meaning and scope thereof, and that the grant of those two permits constitutes the same conduct. Consequently, the fact that the permit of 13 December 2002 was cited as an example by the Commission in the reasoned opinion and is referred to again in this application did not deprive the Kingdom of Spain of the rights conferred by Article 226 EC. Therefore, that permit can be incorporated lawfully into the subject-matter of the action.

30 By its second argument, the Spanish Government submits that the Commission did not specify the obligations which the Kingdom of Spain failed to fulfil.

31 However, it is absolutely clear from the Commission's application that it alleges that the Kingdom of Spain failed to fulfil specific obligations stemming from Article 12(1)(a) of and Annex VI to the directive, namely the obligation to establish a system of strict protection for the animal species listed in Annex IV(a) to the directive (among which is to be found the otter) prohibiting all forms of deliberate capture or killing and the obligation to prohibit means of capture and killing which are non-selective according to their principle or their conditions of use. Accordingly, the Kingdom of Spain was aware of the obligations which it is alleged that it failed to fulfil.

32 By its third and fourth arguments, the Spanish Government alleges that the Commission restricted the subject-matter of the application for failure to fulfil obligations. During the pre-litigation procedure the Commission referred, on the one hand, to the protection of five other animal species apart from the otter and, on the other hand, to a variety of hunting methods and not only the use of stopped snares.

33 It must be borne in mind that, as the Commission rightly observes, the Court has already found that it is possible to limit the subject-matter of the proceedings at the stage of the proceedings before the Court (see to that effect Case C-279/94 *Commission* v *Italy* [1997] ECR I-4743, paragraphs 24 and 25; Case C-52/00 *Commission* v *France* [2002] ECR I-3827, paragraph 44; Case C-139/00 *Commission* v *Spain* [2002] ECR I-6407, paragraphs 18 and 19; and Case C-433/03 *Commission* v *Germany* [2005] ECR I-6985, paragraph 28). Accordingly, the Commission could limit the subject-matter of the failure to fulfil obligations alleged in its application to one of the species and one of the hunting methods mentioned during the pre-litigation procedure.

34 By its fifth argument, the Spanish Government submits that the Commission used the pre-litigation procedure as a means of progressively establishing the grounds for the failure to fulfil obligations. The consequence of such conduct is a breach of the principles of legal certainty and of respect for the fundamental rights of the defence.

35 The Commission considers that that argument alleges, on the one hand, the limitation of the subject-matter of the action, and, on the other hand, the absence, in the letter of formal notice, of sufficient evidence to warrant the initiation of infringement proceedings.

36 In this connection, such factors do not however appear capable of affecting the admissibility of the action. First, the Commission was permitted to limit the subject-matter of the proceedings at the stage of the proceedings before the Court, as observed in paragraph 33 of this judgment. Secondly, according to the case-law of the Court the purpose of the pre-litigation procedure is to give the State concerned the opportunity, on the one hand, to comply with its obligations under Community law and, on the other hand, to avail itself of its right to defend itself against the complaints formulated by the Commission (Case C-117/02 *Commission* v *Portugal* [2004] ECR I-5517, paragraph 53). Furthermore, the formal notice cannot be subject to such strict requirements of precision as is the reasoned opinion, since the formal notice cannot, of necessity, contain anything more than an initial brief summary of the complaints (see to that effect Case C-279/94 *Commission* v *Italy*, paragraph 15).

37 As the Advocate General observed at point 24 of her Opinion, whilst it is true that the aim of the letter of formal notice is to delimit the subject-matter of the dispute, the Commission is obliged to specify precisely in the reasoned opinion the grounds of complaint which it has already raised more generally in the letter of formal notice. However, that does not prevent it from restricting the subject-matter of the dispute or expanding it to cover subsequent measures that are essentially the same as the measures challenged in the formal notice.

The plea of inadmissibility alleging an insufficient statement of grounds in the application

38 The second plea of inadmissibility raised by the Spanish Government alleges infringement of Article 38(1)(c) of the Rules of Procedure of the Court of Justice on the one hand and on the other hand an insufficient statement of grounds in the application and failure to prove the alleged failures to fulfil obligations.

39 As regards the first point, it must be stated that the application meets the requirements set out in Article 38(1)(c) of the Rules of Procedure of the Court of Justice as regards the subject-matter of the proceedings and a summary of the pleas in law.

40 With regard to the second point, it must be noted that, as the Commission states, the ground of complaint set out therein falls to be examined in the context of the substance of the case. Therefore, that plea of inadmissibility cannot be upheld.

41 In the light of the foregoing, it must be held that the action is inadmissible to the extent that it is founded on the permit of 24 May 2001 concerning the AV-10.198 hunting area situated in the territory of the municipality of Mediana de la Voltoya in the province of Ávila and is admissible as to the remainder.

The merits of the action

42 It must therefore be considered whether the permit of 13 December 2002 (‘the contested permit’) which relates to the SA-10.328 hunting area situated in the territory of the municipality of Aldeanueva de la Sierra in the province of Salamanca (‘the area concerned’) was issued by the Spanish authorities in breach of the directive.

43 The Commission puts forward two complaints in support of its action. First, the permit to use stopped snares in the area concerned entails the deliberate capture or killing of otters, in breach

of Article 12(1)(a) of the directive. Secondly, the Commission submits that the Kingdom of Spain also infringed the provisions in Annex VI(a) to the directive as that permit relates to a means of hunting which is non-selective according to its principle and its conditions of use.

The complaint concerning infringement of Annex VI(a) to the directive

44 By its second complaint, which it is appropriate to examine first, the Commission submits that the permit to use stopped snares infringes Annex VI(a) to the directive since it involves a means of hunting which is non-selective according to its principle and its conditions of use.

45 Under the directive the methods and means of capture and killing listed in Annex VI(a) are prohibited only as regards the cases referred to in Article 15 of the directive, which is the only article referring to that annex.

46 It is clear from that provision that it is prohibited to use non-selective means, in particular those listed in Annex VI(a) to the directive, to capture or kill species of wild fauna listed in Annex V(a) to the directive and, where in accordance with Article 16, derogations are applied, to take, capture or kill species listed in Annex IV(a) to the directive.

47 It must be borne in mind that the contested permit was issued for fox hunting and that the fox is an animal species which is not referred to in either Annex IV(a) or Annex V(a) to the directive. It follows that the prohibition with regard to non-selective means of hunting is not binding on the Spanish authorities in the present case. Therefore, the complaint concerning infringement of Annex VI(a) to the directive must be rejected.

The complaint concerning infringement of Article 12(1)(a) of the directive

48 It must be borne in mind that under Article 12(1)(a) of the directive Member States are required to take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) to the directive in their natural range. That system must, according to that provision, prohibit all forms of deliberate capture or killing of the species referred to.

49 In order to assess the validity of the complaint put forward by the Commission, the presence of the otter in the area concerned must be ascertained, and the circumstances under which the capture or killing of that species is deliberate must be established.

The presence of the otter in the area concerned

– Arguments of the parties

50 First, the Commission submits that, in its reply to the reasoned opinion, the Spanish Government acknowledged the presence of the otter in the area concerned as in that response it stated that the otter may be found throughout virtually the whole of the territory of Castilla y Léon.

51 Secondly, the presence of the otter is borne out by the scientific information sheets ‘Natura 2000’ which the Kingdom of Spain submitted to the Commission concerning the sites of Quilamas (Salamanca) and Encinares de los ríos Adaja y Voltoya (Ávila), the site of Quilamas being adjacent to the area concerned.

52 Thirdly, waterways, which are a necessary component of the habitat of otters, cross that area.

53 Lastly, monographs on the position of otters in Spain also confirm that that species is to be found in the area concerned.

54 In view of all those factors, the Commission submits that if the Spanish Government considers that the otter is not to be found in that area, it must prove it by submitting a technical study carried out on site.

55 The Spanish Government submits that there are no otters in the area concerned. In reply to the first argument put forward by the Commission, it observes that acknowledging that a particular animal species is present in a territory does not imply that that species occupies all the habitats in that territory.

56 The Spanish Government also states that waterways are a necessary component of the habitat of otters whereas the area concerned is neither a coastal area nor an area adjoining a river. It adds that the rivers and streams which cross that area are of a seasonal nature as they dry up during the summer months.

57 Furthermore, monographs produced by the Commission prove that there are no otters in the area concerned.

58 Lastly, the Spanish Government considers that there is in that area merely a likelihood that otters are to be found and that the Commission has not established their presence in so far as it does not have either direct evidence, such as the capture of specimens of that species, or indirect evidence, such as the existence of otter tracks.

– Findings of the Court

59 It must be borne in mind that, according to the settled case-law of the Court, in an action for failure to fulfil obligations brought under Article 226 EC it is for the Commission to prove that the obligation has not been fulfilled without being able to rely on any presumption (see to that effect, inter alia, Case 96/81 *Commission* v *Netherlands* [1982] ECR 1791, paragraph 6; Case C-194/01 *Commission* v *Austria* [2004] ECR I-4579, paragraph 34; and Case C-6/04 *Commission* v *United Kingdom* [2005] ECR I-9017, paragraph 75).

60 As regards the scientific information sheets ‘Natura 2000’, it must be stated that, as the Advocate General observed in point 71 of her Opinion, they cover the Quilamas site, which has a surface area of over 10 000 hectares. Admittedly, the area concerned is situated in the immediate vicinity of that site, to the north-west. However, it is common ground that the largest waterways on that site, including the Arroyo de las Quilamas, flow to the south-east and are separated from the area concerned by a range of hills with a height of several hundred metres. Therefore, it is unlikely that otters from the populations living in the network of waterways on the Quilamas site would move into the area concerned.

61 Furthermore, as the Spanish Government, which has not been contradicted on that point by the Commission, has stated, although waterways are a necessary component of the habitat of otters those which cross the area concerned or flow near it are of a seasonal nature.

62 Lastly, as regards the monographs produced by the Commission, it must be stated that they contain contradictory information so that no certainty regarding the presence of the otter in the area concerned is apparent from them.

63 It is clear from the foregoing that the Commission has not furnished evidence to the requisite legal standard as to the presence of otters in the area concerned as the evidence produced proves at the very most that there is a possibility that they are to be found in that area.

Whether the capture of otters is deliberate

– Arguments of the parties

64 The Commission submits that the capture of otters cannot be regarded as accidental and therefore that the condition as to intention which is provided for in Article 12(1)(a) of the directive is met if the Spanish authorities, although they know that otters are present in an area, nevertheless authorise for the purposes of fox hunting the use of a non-selective method of capture there which may adversely affect otters.

65 Thus, by issuing the contested permit, the Kingdom of Spain failed to fulfil the obligation arising out of Article 12(1)(a) of the directive to forestall adverse consequences for otters and created a risk of specimens of that species being deliberately captured.

66 The Spanish Government contends that the contested permit was issued for fox hunting, not otter hunting. It acknowledges the possibility of an indirect effect on otters provided that that animal species is to be found in the area concerned – a circumstance which has not, however, been established.

67 Furthermore, the Spanish Government considers that the stopped snare is a selective means of hunting both according to its principle, as the stop serves to prevent the captured animal's death, and as regards the conditions of use imposed by the contested permit such as the daily inspection of snares, the requirement that any animal which is not covered by that permit be immediately freed or the specific manner in which those snares are set.

– Findings of the Court

68 Under Article 12(1)(a) of the directive, Member States are to take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) to that directive in their natural range, prohibiting all forms of deliberate capture or killing.

69 With respect to the condition as to 'deliberate' action provided for in that provision, it is clear from a reading of the different language versions thereof that 'deliberate' refers to both the capture and the killing of protected animal species.

70 It must also be borne in mind that the Court has categorised as deliberate disturbance within the meaning of Article 12(1)(b) of the directive matters such as the use of mopeds on a beach notwithstanding warnings as to the presence of protected sea turtles' nests and the presence of pedalos and small boats in the sea area of the beaches concerned, and has held that a Member State fails to fulfil its obligations under Article 12(1)(b) and (d) of the directive where it does not take all the requisite specific measures to prevent the deliberate disturbance of the animal species concerned during its breeding period or the deterioration or destruction of its breeding sites (see Case C-103/00 *Commission* v *Greece* [2002] ECR I-1147, paragraphs 36 and 39, and the Opinion of Advocate General Léger in that case, at point 57).

71 For the condition as to 'deliberate' action in Article 12(1)(a) of the directive to be met, it must be proven that the author of the act intended the capture or killing of a specimen belonging to a protected animal species or, at the very least, accepted the possibility of such capture or killing.

72 It is common ground, however, that the contested permit related to fox hunting. Accordingly, the permit in itself is not intended to allow the capture of otters.

73 Furthermore, it must be borne in mind that the presence of otters in the area concerned has not been formally proven, so that it has also not been established that by issuing the contested permit for fox hunting the Spanish authorities knew that they risked endangering otters.

74 It must therefore be held that the requisite criteria, as set out in paragraph 71 of this judgment, for fulfilling the condition relating that the capture or killing of a specimen belonging to a protected animal species is deliberate have not been met in the present case.

75 The Commission's action must therefore be dismissed.

Costs

76 Under Article 69(2) of the Rules of Procedure, the unsuccessful party is to be ordered to pay the costs if they have been applied for in the successful party's pleadings. Since the Kingdom of Spain has applied for costs and the Commission has been unsuccessful, the Commission

must be ordered to pay the costs.

On those grounds, the Court (Second Chamber) hereby:

1. **Dismisses the action;**

2. **Orders the Commission of the European Communities to pay the costs.**

[Signatures]

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* Language of the case: Spanish.

JUDGMENT OF THE COURT (Fourth Chamber)

31 January 2008 (*)

(Freedom to provide services – Electronic communications – Television broadcasting activities – New common regulatory framework – Allocation of radio frequencies)

In Case C-380/05,

REFERENCE for a preliminary ruling under Article 234 EC, from the Consiglio di Stato (Italy), made by decision of 19 April 2005, received at the Court on 18 October 2005, in the proceedings

Centro Europa 7 Srl

v

Ministero delle Comunicazioni e Autorità per le garanzie nelle comunicazioni,

Direzione generale per le concessioni e le autorizzazioni del Ministero delle Comunicazioni,

THE COURT (Fourth Chamber),

composed of K. Lenaerts (Rapporteur), President of the Chamber, G. Arestis, R. Silva de Lapuerta, J. Malenovský and T. von Danwitz, Judges,

Advocate General: M. Poiares Maduro,

Registrar: B. Fülöp, Administrator,

having regard to the written procedure and further to the hearing on 30 November 2006,

after considering the observations submitted on behalf of:

– Centro Europa 7 Srl, by A. Pace, R. Mastroianni and O. Grandinetti, avvocati,

– the Italian Government, by I.M. Braguglia, acting as Agent, assisted by P. Gentili, avvocato dello Stato,

– the Commission of the European Communities, by F. Benyon, E. Traversa, M. Shotter and F. Amato, acting as Agents, assisted by L.G. Radicati di Brozolo, avvocato,

after hearing the Opinion of the Advocate General at the sitting on 12 September 2007,

gives the following

Judgment

1 This reference for a preliminary ruling concerns the interpretation, in the national terrestrial television

broadcasting sector, of the provisions of the EC Treaty on freedom to provide services and competition, Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ 2002 L 108, p. 33) ('the Framework Directive'), Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) (OJ 2002 L 108, p. 21) ('the Authorisation Directive'), Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services (OJ 2002 L 249, p. 21) ('the Competition Directive'), and Article 10 of the European Convention for the Protection of Human Rights and Fundamental Freedoms, signed in Rome on 4 November 1950 ('the ECHR'), in so far as Article 6 EU refers thereto.

2 The reference has been made in proceedings between Centro Europa 7 Srl ('Centro Europa 7') and the Ministero delle Comunicazioni, the Autorità per le garanzie nelle comunicazioni and the Direzione generale per le concessioni e le autorizzazioni del Ministero delle Comunicazioni (collectively, 'the defendants in the main proceedings').

Relevant provisions

Community legislation

3 The new common regulatory framework for electronic communications services, electronic communications networks, associated facilities and associated services ('the NCRF') consists of the Framework Directive and four specific directives, including the Authorisation Directive, which are supplemented by the Competition Directive.

The Framework Directive

4 Article 1(1) of the Framework Directive provides as follows:

'This Directive establishes a harmonised framework for the regulation of electronic communications services, electronic communications networks, associated facilities and associated services. It lays down tasks of national regulatory authorities and establishes a set of procedures to ensure the harmonised application of the regulatory framework throughout the Community.'

5 Article 1(3) of the Framework Directive provides:

'This Directive as well as the Specific Directives are without prejudice to measures taken at Community or national level, in compliance with Community law, to pursue general interest objectives, in particular relating to content regulation and audio-visual policy.'

6 Article 2 of the Framework Directive provides:

'For the purposes of this Directive:

(a) "electronic communications network" means transmission systems … which permit the conveyance of signals by wire, by radio, by optical or by other electromagnetic means, including satellite networks, fixed … and mobile terrestrial networks, … networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed;

…

(c) “electronic communications service” means a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting …

…’

7 Article 8 of the Framework Directive, entitled ‘Policy objectives and regulatory principles’, provides:

‘1. Member States shall ensure that in carrying out the regulatory tasks specified in this Directive and the Specific Directives, the national regulatory authorities take all reasonable measures which are aimed at achieving the objectives set out in paragraphs 2, 3 and 4. Such measures shall be proportionate to those objectives.

…

2. The national regulatory authorities shall promote competition in the provision of electronic communications networks, electronic communications services and associated facilities and services by inter alia:

…

(b) ensuring that there is no distortion or restriction of competition in the electronic communications sector;

…

(d) encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources.

3. The national regulatory authorities shall contribute to the development of the internal market by inter alia:

(a) removing remaining obstacles to the provision of electronic communications networks, associated facilities and services and electronic communications services at European level;

…’

8 Article 9(1) of the Framework Directive provides that ‘Member States shall ensure the effective management of radio frequencies for electronic communication services in their territory’ and ‘that the allocation and assignment of such radio frequencies by national regulatory authorities are based on objective, transparent, non-discriminatory and proportionate criteria’.

9 Article 28(1) of the Framework Directive states that ‘Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive not later than 24 July 2003’ and ‘shall apply those measures from 25 July 2003.’

The Authorisation Directive

10 Article 1 of the Authorisation Directive provides:

‘1. The aim of this Directive is to implement an internal market in electronic communications networks and services through the harmonisation and simplification of authorisation rules and conditions in order to facilitate their provision throughout the Community.

2. This Directive shall apply to authorisations for the provision of electronic communications networks and services.’

11 Article 2(1) of the Authorisation Directive provides:

‘For the purposes of this Authorisation Directive, the definitions set out in Article 2 of … [the Framework Directive] shall apply.’

12 Article 2(2)(a) of the Authorisation Directive provides that ‘general authorisation’ means ‘a legal framework established by the Member State ensuring rights for the provision of electronic communications networks or services and laying down sector specific obligations that may apply to all or to specific types of electronic communications networks and services, in accordance with this Directive’.

13 Article 3 of the Authorisation Directive, entitled ‘General authorisation of electronic communications networks and services’, provides:

‘1. Member States shall ensure the freedom to provide electronic communications networks and services, subject to the conditions set out in this Directive. To this end, Member States shall not prevent an undertaking from providing electronic communications networks or services, except where this is necessary for the reasons set out in Article 46(1) of the Treaty.

2. The provision of electronic communications networks or the provision of electronic communications services may, without prejudice to the specific obligations referred to in Article 6(2) or rights of use referred to in Article 5, only be subject to a general authorisation. The undertaking concerned may be required to submit a notification but may not be required to obtain an explicit decision or any other administrative act by the national regulatory authority before exercising the rights stemming from the authorisation. Upon notification, when required, an undertaking may begin activity, where necessary subject to the provisions on rights of use in Articles 5, 6 and 7.

…’

14 Article 5 of the Authorisation Directive, entitled ‘Rights of use for radio frequencies and numbers’, reads as follows:

‘1. Member States shall, where possible, in particular where the risk of harmful interference is negligible, not make the use of radio frequencies subject to the grant of individual rights of use but shall include the conditions for usage of such radio frequencies in the general authorisation.

2. Where it is necessary to grant individual rights of use for radio frequencies and numbers, Member States shall grant such rights, upon request, to any undertaking providing or using networks or services under the general authorisation, subject to the provisions of Articles 6, 7 and 11(1)(c) of this Directive and any other rules ensuring the efficient use of those resources in accordance with … [the Framework Directive].

Without prejudice to specific criteria and procedures adopted by Member States to grant rights of use of radio frequencies to providers of radio or television broadcast content services with a view to

pursuing general interest objectives in conformity with Community law, such rights of use shall be granted through open, transparent and non-discriminatory procedures …

…

5. Member States shall not limit the number of rights of use to be granted except where this is necessary to ensure the efficient use of radio frequencies in accordance with Article 7.'

15 Article 7 of the Authorisation Directive, entitled 'Procedure for limiting the number of rights of use to be granted for radio frequencies', provides:

'1. Where a Member State is considering whether to limit the number of rights of use to be granted for radio frequencies, it shall inter alia:

(a) give due weight to the need to maximise benefits for users and to facilitate the development of competition;

…

(c) publish any decision to limit the granting of rights of use, stating the reasons therefore;

(d) after having determined the procedure, invite applications for rights of use; and

(e) review the limitation at reasonable intervals or at the reasonable request of affected undertakings.

…

3. Where the granting of rights of use for radio frequencies needs to be limited, Member States shall grant such rights on the basis of selection criteria which must be objective, transparent, non-discriminatory and proportionate. Any such selection criteria must give due weight to the achievement of the objectives of Article 8 of … [the Framework Directive].

…'

16 Article 17 of the Authorisation Directive, entitled 'Existing authorisations', reads as follows:

'1. Member States shall bring authorisations already in existence on the date of entry into force of this Directive into line with the provisions of this Directive by at the latest the date of application referred to in Article 18(1), second subparagraph.

…'

17 Article 18(1) of the Authorisation Directive states that the 'Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive by 24 July 2003 at the latest' and 'shall apply those measures from 25 July 2003.'

The Competition Directive

18 According to points 1 and 3 of Article 1 of the Competition Directive, that directive is to apply to electronic communications networks and electronic communications services, as defined in Article 2(a) and (c) of the Framework Directive.

19 Article 2 of the Competition Directive, entitled ‘Exclusive and special rights for electronic communications networks and electronic communications services’, provides:

‘1. Member States shall not grant or maintain in force exclusive or special rights for the establishment and/or the provision of electronic communications networks, or for the provision of publicly available electronic communications services.

2. Member States shall take all measures necessary to ensure that any undertaking is entitled to provide electronic communications services or to establish, extend or provide electronic communications networks.

…

4. Member States shall ensure that a general authorisation granted to an undertaking to provide electronic communications services or to establish and/or provide electronic communications networks, as well as the conditions attached thereto, shall be based on objective, non-discriminatory, proportionate and transparent criteria.

…’

20 Article 4 of the Competition Directive, entitled ‘Rights of use of frequencies’, states:

‘Without prejudice to specific criteria and procedures adopted by Member States to grant rights of use of radio frequencies to providers of radio or television broadcast content services with a view to pursuing general interest objectives in conformity with Community law:

1. Member States shall not grant exclusive or special rights of use of radio frequencies for the provision of electronic communications services.

2. The assignment of radio frequencies for electronic communication services shall be based on objective, transparent, non-discriminatory and proportionate criteria.’

21 Article 9 of the Competition Directive provides:

‘Member States shall supply to the Commission not later than 24 July 2003 such information as will allow the Commission to confirm that the provisions of this Directive have been complied with.’

National legislation

Law No 249 of 31 July 1997

22 Law No 249 of 31 July 1997 (Ordinary Supplement to GURI No 177 of 31 July 1997) (‘Law No 249/1997’), which came into force on 1 August 1998, set up the Autorità per le garanzie nelle comunicazioni (Communications Regulatory Authority; ‘the Autorità’).

23 Article 2(6) of Law No 249/1997 imposed restrictions on concentrations in the television broadcasting sector, prohibiting the same operator from holding rights permitting it to broadcast at national level on more than 20% of the television channels operating on terrestrial frequencies.

24 Article 3(1) of Law No 249/1997 provided that operators authorised to broadcast under the previous legal framework could continue to broadcast at national and local level until new rights were granted or applications for new rights were rejected but, in any event, not after 30 April 1998.

25 Article 3(2) of Law No 249/1997 provided for the adoption by the Autorità of a national plan for the allocation of radio frequencies for broadcast television ('the national allocation plan for radio frequencies') by 31 January 1998 at the latest and, on the basis of that plan, the allocation of new rights by 30 April 1998 at the latest.

26 According to the information in the decision making the reference, borne out by the observations of the Italian Government and the Commission of the European Communities, the national allocation plan for radio frequencies was adopted on 30 October 1998 by Decision No 68/98 of the Autorità, and that authority adopted, by Decision No 78/98 of 1 December 1998, the regulation concerning the conditions and detailed rules governing the grant of television broadcasting rights on analogue terrestrial frequencies.

27 Article 3(6) of Law No 249/1997 provided for transitional arrangements for the existing national television channels exceeding the limits for concentration imposed in Article 2(6) of that Law ('the channels in breach of the threshold') by allowing those channels to continue to broadcast on terrestrial radio frequencies on a transitional basis after 30 April 1998, in compliance with the obligations imposed on the channels holding rights, provided that the programmes were broadcast on satellite or cable at the same time.

28 Under Article 3(7) of Law No 249/1997, the Autorità was entrusted with determining the period within which, having regard to the real and significant increase in users watching programmes by cable or satellite, the channels in breach of the threshold were to broadcast their programmes only by satellite or cable, thus relinquishing terrestrial radio frequencies.

29 According to the information in the decision making the reference and supported by the observations of the Italian Government and the Commission, by judgment No 466 of the Corte costituzionale (Constitutional Court) (Italy) of 20 November 2002 (GURI of 27 November 2002), that deadline was fixed at 31 December 2003.

Law No 66 of 20 March 2001

30 According to the case-file, under Decree-Law No 5 of 23 January 2001 (GURI No 19 of 24 January 2001, p. 5), converted into law and amended by Law No 66 of 20 March 2001 (GURI No 70 of 24 March 2001, p. 3), the operators lawfully engaged in television broadcasting activities on terrestrial frequencies were authorised to continue to broadcast until the national allocation plan for radio frequencies for digital television was implemented.

Law No 43 of 24 February 2004 and Law No 112 of 3 May 2004

31 Article 1 of Decree-Law No 352 of 24 December 2003 (GURI No 300 of 29 December 2003, p. 4; 'Decree-Law No 352/2003'), converted into law and amended by Law No 43 of 24 February 2004 (GURI No 47 of 26 February 2004, p. 4), authorised the channels in breach of the threshold to continue their broadcasts on the televised analogue and digital networks pending the completion of an inquiry into the development of digital television channels.

32 Law No 112 of 3 May 2004 (Ordinary Supplement to GURI No 82 of 5 May 2004) ('Law No 112/2004') specified the different stages for the launch of the phase of digital broadcasting on terrestrial radio frequencies.

33 Article 23 of Law No 112/2004 provides:

1. ‘Until the national allocation plan for radio frequencies for digital television has been implemented, the operators exercising, on any basis, television broadcasting activities at national or local level who fulfil the conditions necessary to obtain authorisation for experimental digital broadcasting on terrestrial frequencies, under … Decree-Law No 5 [of 23 January 2001], now, after amendment, Law No 66 [of 20 March 2001], may carry out, including by simultaneous repeats of programmes already broadcast using analogue technology, the experimentation in question, until the conversion of the networks has been completed, and apply, from the date of entry into force of this Law, … for the licences and authorisations necessary to broadcast using digital technology on terrestrial frequencies.

2. Experimental digital broadcasting may be carried out by means of installations lawfully exercising analogue activities on the date of the entry into force of this Law.

3. In order to allow digital networks to be set up, transfers of installations or branches of undertakings between operators lawfully televising at national or local level shall be authorised, on condition that acquisitions are intended for digital broadcasting.

…

5. With effect from the date of entry into force of this Law, the licence to operate a television network shall be issued, upon request, to persons lawfully engaged in television broadcasting pursuant to a grant of rights or under the general consent provided for in subparagraph 1, where they show that they have attained a coverage of not less than 50% of the population or of the local catchment area.

…

9. In order to facilitate the conversion of the analogue system to the digital system, the broadcasting of television programmes shall be carried on through installations lawfully operating on the date of the entry into force of this Law …’

The dispute in the main proceedings and the questions referred for a preliminary ruling

34 The dispute in the main proceedings relates to compensation for the harm which Centro Europa 7 claims to have suffered as a result of the fact that the defendants in the main proceedings did not allocate to it radio frequencies for terrestrial analogue television broadcasting.

35 On 28 July 1999, Centro Europa 7 was granted by the competent Italian authorities, pursuant to Law No 249/1997, rights for terrestrial television broadcasting at national level authorising the installation and use of a television network using analogue technology. For the allocation of radio frequencies, the rights referred to the national allocation plan for radio frequencies, which was adopted on 30 October 1998. According to the national court, however, that plan has not been implemented, with the result that, although it has rights, Centro Europa 7 has never been in a position to broadcast for lack of radio frequencies.

36 Centro Europa 7 brought an action before the Tribunale amministrativo regionale (Regional Administrative Court) del Lazio (Italy) seeking, inter alia, a declaration that it was entitled to the allocation of frequencies and to compensation for the damage suffered.

37 That court dismissed that application by judgment of 16 September 2004.

38 According to the decision making the reference, in the appeal brought by Centro Europa 7 against that

judgment before the Consiglio di Stato (Council of State) (Italy), the defendants in the main proceedings invoke against it, inter alia, Law No 112/2004.

39 While stating, in that decision, that it restricted its examination to Centro Europa 7's application for damages and did not intend to rule at that stage on the application for the grant of radio frequencies, the Consiglio di Stato observes that the failure to allocate radio frequencies to Centro Europa 7 was caused by essentially legislative factors.

40 It notes that Article 3(2) of Law No 249/1997 enabled the 'de facto users' of radio frequencies, authorised to carry on their activity under the earlier system, to continue broadcasting until new rights were granted or applications for new rights were rejected and, in any event, not after 30 April 1998.

41 It notes, also, that Article 3(7) of Law No 249/1997 authorised the continuation of those broadcasts by referring back to the Autorità to fix a deadline, on the sole condition that the programmes are broadcast simultaneously on terrestrial radio frequencies and by satellite or cable. In the absence of a date fixed by the Autorità, the Corte costituzionale set 31 December 2003 as the date by which the programmes broadcast by the channels in breach of the threshold would have to be broadcast only by satellite or cable, so that, according to the national court, the radio frequencies to be allocated to Centro Europa 7 would be freed up.

42 According to the national court, that deadline was, however, not complied with following the intervention of the national legislature, as Article 1 of Decree-Law No 352/2003, now Law No 43 of 24 February 2004, extended the activities of the channels in breach of the threshold pending the completion of an inquiry by the Autorità into the development of digital channels, then by virtue of Law No 112/2004, in the light of, inter alia, Article 23(5) thereof.

43 Law No 112/2004 extended, by a general authorisation mechanism, the possibility for the channels in breach of the threshold to continue to broadcast on the terrestrial radio frequencies until the national allocation plan for radio frequencies for digital television was implemented, with the result that those channels were not required to free up the radio frequencies intended for allocation to the rights holders.

44 According to the national court, that Law therefore had the effect of blocking the radio frequencies intended for allocation to the rights holders and of preventing operators other than those de facto broadcasting on terrestrial frequencies from participating in the digital television experimentation.

45 Since Centro Europa 7 disputed the compatibility of Decree-Law No 352/2003 and Law No 112/2004 with Community law, the Consiglio di Stato asks whether the Italian legislation, starting from Law No 249/1997, is compatible with the Treaty provisions on freedom to provide services and on competition, Articles 8 and 9(1) of the Framework Directive, Articles 5, 7 and 17 of the Authorisation Directive and the principle of pluralism of information sources, part of Article 10 of the ECHR, as a general principle of Community law.

46 In those circumstances, the Consiglio di Stato decided to stay the proceedings and to refer the following questions to the Court for a preliminary ruling:

'1. Does Article 10 of the ECHR, as referred to in Article 6 of the [EU] Treaty, guarantee pluralism in the broadcasting sector, thus requiring the Member States to secure pluralism and competition in the sector based on an antitrust system which, in step with technological development, secures network access and a multiplicity of operators and renders duopolistic market behaviour unlawful?

2. Do the provisions of the … Treaty which secure freedom to provide services and competition, on

the interpretation provided by the Commission in the interpretative communication of 29 April 2000 on grants of rights under Community law, require the principles governing that matter to be capable of ensuring equal non-discriminatory treatment, as well as transparency, proportionality and respect for the rights of individuals; and are those provisions and principles of the Treaty infringed by Article 3(7) of Italian Law No 249/1997, and by Article 1 of Decree-Law [No 352/2003], inasmuch as those provisions enabled individuals operating networks in breach of the limits laid down by competition law to continue to operate, thereby excluding operators, such as the appellant undertaking, which, though in possession of the relevant rights granted following a regular competitive procedure, were unable to carry on the activity in respect of which such rights were granted because of a failure to allocate frequencies owing to their insufficient number or scarcity as a result of the continued exercise of rights by the owners of networks in breach of the limits on concentrations under antitrust law?

3. With effect from 25 July 2003, does Article 17 of [the Authorisation Directive] render that directive directly effective in the internal legal order and oblige a Member State which has granted broadcasting rights (right to install networks or provide electronic communication services or the right to use frequencies) to bring them into line with Community rules; and does that entail the need actually to allocate the frequencies necessary for carrying on the activity in question?

4. Do Article 9 of [the Framework Directive] and Article 5 of the Authorisation Directive providing for transparent and non-discriminatory public procedures (Article 5) conducted on the basis of objective, transparent, non-discriminatory and proportionate criteria (Article 9) preclude a system providing for general authorisation under national law (Article 23(5) of Law No 112/2004); by permitting the continued operation, under that system of networks in breach of limits and not selected under a competitive procedure, do those provisions ultimately impinge on the Community-law rights under (Article 17(2) of the … Authorisation Directive) of other undertakings which are prevented from operating even though they have been successful in competitive procedures?

5. Do Article 9 of the [Framework Directive], the second subparagraph of Article 5(2) and Article 7(3) of the Authorisation Directive, and Article 4 of the [Competition Directive], require the Member States to arrange for the cessation, at least as from 25 July 2003 (see Article 17 of the Authorisation Directive), of a situation of de facto use of frequencies (use of facilities without grant of rights or authorisations issued following a selection procedure), on the basis of the broadcasting system already in place, so that broadcasting cannot be undertaken where there is no proper planning in regard to matters concerning the airwaves and no logical increase in pluralism, in contravention of rights awarded by the Member State following a public procedure?

6. Is the derogation in the second subparagraph of Article 5(2) of the … Authorisation Directive, and in Article 4 of the [Competition Directive], available to be relied on by the Member State solely in order to protect pluralism of information and to guarantee the protection of cultural or linguistic diversity and not in favour of operators of networks in breach of the antitrust limits laid down in national competition legislation?

7. In order to benefit from the derogation under Article 5 of [the Authorisation Directive], does the Member State have to indicate the objectives actually pursued by the national derogatory rules?

8. May that derogation be applied, in addition to the case of the concessionary of the public broadcasting service (RAI in Italy), in favour also of private operators who have been unsuccessful in competitive procedures and to the detriment of undertakings who may have duly been granted rights following a competitive procedure?

9. Under Community rules (primary and secondary legislation) on workable competition in the broadcasting sector, ought the national legislature to have avoided extending the old transitory analogue system on the advent of the terrestrial digital system (and the attendant generalised transition to digital)? Only if analogue broadcasting is ended and replaced by the switch to digital will it be possible to reallocate frequencies freed for various uses. If terrestrial digital is merely operated alongside analogue, there will be an attendant accentuating of the scarcity of available frequencies owing to the existence of analogue and digital transmission in parallel (simulcast)?

10. Lastly, is the pluralism of sources of information and of competition in the broadcasting sector, which is guaranteed by European law, secured by national rules, such as Law No 112/2004 providing for a new limit of 20 per cent of resources linked to a new very wide criterion (the ICS – integrated communications system – Article 2(g) and Article 15 of Law No 112/2004)? This criterion also brings in activities which do not affect media pluralism, whereas under antitrust law the "relevant market" is constructed normally by differentiating the markets in the broadcasting sector by drawing a distinction between pay TV and non-pay TV operating via the airwaves (reference is made inter alia to [Commission Decision of 21 March 2000 declaring a concentration to be compatible with the common market (Case No COMP/JV. 37 – BSKYB/Kirch Pay TV], based on [Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings] Merger Procedure 21/03/2000 and [Commission Decision of 2 April 2003 declaring a concentration to be compatible with the common market and the EEA Agreement (Case No COMP/M. 2876 – Newscorp/Telepiù), based on [Regulation No 4064/89].'

The questions

47 By its questions, the national court asks the Court, essentially, to rule on the interpretation of the provisions of the Treaty on freedom to provide services and competition, the Framework Directive, the Authorisation Directive, the Competition Directive and Article 10 of the ECHR, in so far as Article 6 EU refers thereto.

The jurisdiction of the Court and the admissibility of the questions

48 As a preliminary point, it must be stated, first, that by some of its questions the national court is inviting the Court to give a ruling on the compatibility with Community law of certain provisions of the Italian legislation relevant in this case.

49 It is not the task of the Court, in preliminary ruling proceedings, to rule upon the compatibility of provisions of national law with Community law or to interpret national legislation or regulations (see Case C-151/02 *Jaeger* [2003] ECR I-8389, paragraph 43, and Case C-237/04 *Enirisorse* [2006] ECR I-2843, paragraph 24 and the case-law cited).

50 The Court has, however, repeatedly held that it is competent to give the national court full guidance on the interpretation of Community law in order to enable it to determine the issue of compatibility for the purposes of the case before it (see, inter alia, Case C-292/92 *Hünermundand Others* [1993] ECR I-6787, paragraph 8, and *Enirisorse*, paragraph 24).

51 It is therefore appropriate for the Court, in the present case, to restrict its analysis to the provisions of Community law by providing an interpretation of them which will be of use to the national court, which has the task of determining the compatibility of the provisions of national law with Community law, for the purposes of deciding the dispute before it.

52 Secondly, it must be recalled that, according to settled case-law, it is solely for the national court before which the dispute has been brought, and which must assume responsibility for the subsequent judicial decision, to determine in the light of the particular circumstances of the case both the need for a preliminary ruling in order to enable it to deliver judgment and the relevance of the questions which it submits to the Court (Case C-415/93 *Bosman* [1995] ECR I-4921, paragraph 59, and Case C-466/04 *Acereda Herrera* [2006] ECR I-5341, paragraph 47).

53 None the less, the Court has no jurisdiction to give a preliminary ruling on a question submitted by a national court where it is quite obvious that the ruling sought by that court on the interpretation of a Community rule bears no relation to the actual facts of the main action or its purpose, where the problem is hypothetical, or where the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it (*Bosman*, paragraph 61; *Acereda Herrera*, paragraph 48; and Joined Cases C-94/04 and C-202/04 *Cipolla and Others* [2006] ECR I-11421, paragraph 25).

54 In that regard, the decision making the reference must set out the precise reasons why the national court was unsure as to the interpretation of Community law and why it considered it necessary to refer questions to the Court for a preliminary ruling. Against that background, it is essential that the national court provide at the very least some explanation of the reasons for the choice of the Community provisions which it requires to be interpreted and of the link it establishes between those provisions and the national legislation applicable to the dispute in the main proceedings (order in Case C-167/94 *Grau Gomis and Others* [1995] ECR I-1023, paragraph 9; Joined Cases C-453/03, C-11/04, C-12/04 and C-194/04 *ABNA and Others* [2005] ECR I-10423, paragraph 46; Joined Cases C-338/04, C-359/04 and C-360/04 *Placanica and Others* [2007] ECR I-1891, paragraph 34; and Case C-295/05 *Asemfo* [2007] ECR I-2999, paragraph 33).

55 It must be stated, however, that as regards its tenth question, the national court does not give any indication as to the Community provisions which it requires to be interpreted or any explanation of the link it establishes between those provisions and the dispute in the main proceedings or the subject-matter of that dispute.

56 The tenth question is for that reason inadmissible.

57 Thirdly, the need to provide an interpretation of Community law which will be of use to the national court makes it necessary that the referring court should define the factual and legislative context of the questions it is asking or, at the very least, explain the factual circumstances on which those questions are based (see Joined Cases C-320/90 to C-322/90 *Telemarsicabruzzo and Others* [1993] ECR I-393, paragraph 6; Case C-341/95 *Bettati* [1998] ECR I-4355, paragraph 67; Case C-67/96 *Albany International* [1999] ECR I-5751, paragraph 39; and *Cipolla and Others*, paragraph 25).

58 Those requirements are of particular importance in the area of competition, which is characterised by complex factual and legal situations (see *Telemarsicabruzzo and Others*, paragraph 7; *Bettati*, paragraph 68; and *Albany International*, paragraph 39).

59 In this case, as the Advocate General notes in point 27 of his Opinion, it seems that, by asking for an interpretation of the provisions of the Treaty on competition in its second question, the referring court has in mind, essentially, Article 86(1) EC, read in conjunction with Article 82 EC.

60 In accordance with the Court's case-law, a Member State infringes the prohibitions laid down by those two provisions where the undertaking in question, merely by exercising the special or exclusive

rights conferred on it, is led to abuse its dominant position or where such rights are liable to create a situation in which that undertaking is led to commit such abuses (Joined Cases C-180/98 to C-184/98 *Pavlov and Others* [2000] ECR I-6451, paragraph 127; Case C-475/99 *Ambulanz Glöckner* [2001] ECR I-8089, paragraph 39; and Case C-451/03 *Servizi Ausiliari Dottori Commercialisti* [2006] ECR I-2941, paragraph 23).

61 However, the decision making the reference does not contain any indication regarding, inter alia, the definition of the relevant market, the calculation of the market shares held by the various undertakings operating on that market, and the supposed abuse of a dominant position.

62 Consequently, it must be held that, in so far as it relates to the Treaty provisions on competition, the second question is inadmissible (see, to that effect, Case C-134/03 *Viacom Outdoor* [2005] ECR I-1167, paragraphs 25 to 29).

63 The ninth question must be regarded as being inadmissible on the same grounds.

64 Fourthly, it is necessary to determine whether the Court has jurisdiction in the present case to give a ruling on Article 49 EC, since it is common ground that all aspects of the main proceedings are confined within only one Member State.

65 National legislation such as that at issue in the main proceedings, which applies without distinction to Italian nationals and to nationals of other Member States, is generally likely to fall within the scope of the provisions on freedom to provide services established by the Treaty only to the extent to which it applies to situations related to intra-Community trade (see, to that effect, Case 286/81 *Oosthoek's Uitgeversmaatschappij* [1982] ECR 4575, paragraph 9, and Case C-6/01 *Anomar and Others* [2003] ECR I-8621, paragraph 39).

66 It is possible, in the main proceedings, that undertakings established in Member States other than the Italian Republic have been or would be interested in providing the services concerned (see, to that effect, Case C-87/94 *Commission* v *Belgium* [1996] ECR I-2043, paragraph 33, and Case C-458/03 *Parking Brixen* [2005] ECR I-8585, paragraph 55).

67 The finding of a link with intra-Community trade will be presumed if the market in question has a certain cross-border interest (Case C-507/03 *Commission* v *Ireland* [2007] ECR I-0000, paragraph 29), which it is for the national court to determine.

68 In any event, it is necessary to answer the second question referred to the Court in this case since it relates to Article 49 EC.

69 Such a reply might be useful to the national court if its national law were to require that an Italian national must be allowed to enjoy the same rights as those which a national of another Member State would derive from Community law in the same situation (Case C-448/98 *Guimont* [2000] ECR I-10663, paragraph 23; Joined Cases C-515/99, C-519/99 to C-524/99 and C-526/99 to C-540/99 *Reisch and Others* [2002] ECR I-2157, paragraph 26; *Anomar and Others*, paragraph 41; *Servizi Ausiliari Dottori Commercialisti*, paragraph 29; and *Cipolla and Others*, paragraph 30).

70 Consequently, the Court has jurisdiction to give a ruling on the interpretation of Article 49 EC.

71 The second question is therefore admissible in so far as it relates to Article 49 EC.

The second, fourth and fifth questions

72 The second, fourth and fifth questions all relate, essentially, to whether the provisions of Article 49 EC or the NCRF preclude, in television broadcasting matters, national legislation the application of which means that it is impossible for an operator holding rights to broadcast without the allocation of broadcasting radio frequencies.

73 It is true that, in respect of the second question, the Court can answer from the point of view of Article 49 EC only in so far as that question relates to Italian legislation, namely Article 3(7) of Law No 249/1997, which pre-dates the application of the NCRF, as is clear from Article 28(1) of the Framework Directive, Article 18(1) of the Authorisation Directive and Article 9 of the Competition Directive.

74 Likewise, the fourth and fifth questions refer only to the NCRF, since they concern national legislation subsequent to the date of application of the NCRF, namely the provisions of Law No 112/2004.

75 First, however, the second question also relates to Italian legislation subsequent to the applicability of the NCRF, namely Article 1 of Decree-Law No 352/2003.

76 Secondly, as pointed out by the Commission in its observations to the Court, the NCRF implemented provisions of the Treaty, in particular those on freedom to provide services, in the area of electronic communications networks and services, as defined in Articles 2(a) and (c) of the Framework Directive, Article 2(1) of the Authorisation Directive and points 1 and 3 of Article 1 of the Competition Directive.

77 The second, fourth and fifth questions must therefore be dealt with together, since the answers relating to the NCRF are relevant only from its date of application, as set out in Article 28(1) of the Framework Directive, Article 18(1) of the Authorisation Directive and Article 9 of the Competition Directive.

78 In order to provide an answer which is of use to the national court, it should be recalled that the Treaty does not require national monopolies having a commercial character to be abolished completely, but requires them to be adjusted in such a way as to ensure that no discrimination regarding the conditions under which goods are procured and marketed exists between nationals of Member States (Case C-189/95 *Franzén* [1997] ECR I-5909, paragraph 38 and the case-law cited).

79 However, Article 49 EC precludes the application of any national rules which have the effect of making the provision of services between Member States more difficult than the provision of services purely within one Member State (Joined Cases C-544/03 and C-545/03 *Mobistar and Belgacom Mobile* [2005] ECR I-7723, paragraph 30).

80 In the area of electronic communications networks and services, those principles were implemented by the NCRF.

81 Article 8 of the Framework Directive places on the Member States the obligation to ensure that the national regulatory authorities take all reasonable measures aimed at promoting competition in the provision of electronic communications services, ensuring that there is no distortion or restriction of competition in the electronic communications sector and removing remaining obstacles to the provision of those services at European level.

82 Likewise, Article 2(2) of the Competition Directive requires the Member States to take all measures necessary to ensure that any undertaking is entitled to provide electronic communications services or to establish, extend or provide electronic communications networks.

83 Article 3(1) of the Authorisation Directive also enjoins the Member States to ensure the freedom to provide electronic communications networks and services and prohibits them from preventing an undertaking from providing those networks or services, except where this is necessary for the reasons set out in Article 46(1) EC.

84 For that purpose, Article 3(2) of the Authorisation Directive states that the provision of electronic communications networks or electronic communications services may be subject only to a general authorisation.

85 On that point, it must be stated that, in the area of television broadcasting, freedom to provide services, as enshrined in Article 49 EC and implemented in this area by the NCRF, requires not only the grant of broadcasting authorisations, but also the grant of broadcasting radio frequencies.

86 An operator cannot exercise effectively the rights which it derives from Community law in terms of access to the television broadcasting market without broadcasting radio frequencies.

87 To that end, Article 9(1) of the Framework Directive provides that the 'Member States shall ensure the effective management of radio frequencies for electronic communication services in their territory'.

88 Similarly, Article 5(1) of the Authorisation Directive states that, where possible, Member States may not, in particular where the risk of harmful interference is negligible, make the use of radio frequencies subject to the grant of individual rights of use but are to include the conditions for usage of such radio frequencies in the general authorisation.

89 Moreover, point 1 of Article 4 of the Competition Directive prohibits the Member States from granting exclusive or special rights of use of radio frequencies for the provision of electronic communications services.

90 In the present case, the national court questions the Court on the criteria applied for the grant of radio frequencies for the purpose of operating on the analogue television broadcasting market.

91 The national court is not questioning the Court on the criteria which have been applied, pursuant to Law No 249/1997, for the grant of rights to operate on the analogue television broadcasting market. Nor are those criteria disputed by Centro Europa 7, either before the national court or in the observations it has submitted to the Court, since Centro Europa 7 was granted rights in accordance with those criteria.

92 There is therefore no need for the Court to give a ruling on those criteria.

93 The national court has doubts as to the compatibility of Law No 249/1997 with Community law only in so far as Article 3(7) of that Law set up transitional arrangements in favour of the incumbent networks, which had the effect of preventing operators without radio frequencies, such as Centro Europa 7, from accessing the market in question.

94 The national court is also questioning the Court on the criteria applied, pursuant to Law No 112/2004, for granting rights to operate on the digital and analogue television broadcasting market, only in so far as those criteria consolidated the transitional arrangements structured in favour of the existing networks in Article 1 of Decree-Law No 352/2003, which had the effect of precluding the grant to operators of radio frequencies for the purpose of operating on the analogue television broadcasting market, even though they had been granted rights under Law No 249/1997.

95 In that regard, the successive application of the transitional arrangements structured in favour of the incumbent networks in Article 3(7) of Law No 249/1997 and Article 1 of Decree-Law No 352/2003 had the effect of preventing operators without broadcasting radio frequencies from accessing the market in question.

96 The view must also be taken that, by issuing a general authorisation to operate on the broadcasting services market only to the incumbent networks, Article 23(5) of Law No 112/2004 consolidated the restrictive effect confirmed in the preceding paragraph.

97 First, by limiting de facto the number of operators able to broadcast on the market in question, those measures are and/or were likely to hinder the provision of services in the area of television broadcasting.

98 Secondly, those measures have and/or have had the effect of freezing the structures on the national market and protecting the position of the operators already active on that market.

99 Consequently, Article 49 EC and, from the date on which they became applicable, Article 9(1) of the Framework Directive, Article 5(1) of the Authorisation Directive and point 1 of Article 4 of the Competition Directive preclude such measures unless they are justified.

100 In that respect, it is clear from the case-law of the Court that a licensing system which restricts the number of operators in the national territory is capable of being justified by general-interest objectives (see, to that effect, *Placanica and Others*, paragraph 53), on condition that the restrictions resulting from them are appropriate and do not go beyond what is necessary to attain those objectives.

101 Thus, the NCRF expressly allows the Member States, under Article 1(3) of the Framework Directive, to adopt or maintain, in compliance with Community law, provisions pursuing general-interest objectives, in particular relating to audio-visual policy.

102 Likewise, the first subparagraph of Article 5(2) of the Authorisation Directive allows the Member States to grant rights to the use of radio frequencies on an individual basis with a view to complying with the objective of the efficient use of radio frequencies, as referred to by the Framework Directive.

103 However, as the Advocate General stated in points 34 and 37 of his Opinion, in order for such arrangements, which generally adversely affect Article 49 EC and the NCRF, to be justified they must not only comply with general-interest objectives but also be structured on the basis of objective, transparent, non-discriminatory and proportionate criteria (see, to that effect, *Placanica and Others*, paragraph 49 and the case-law cited).

104 Accordingly, Article 9(1) of the Framework Directive provides that the Member States are to ensure that the allocation and assignment of radio frequencies by the national regulatory authorities are based on objective, transparent, non-discriminatory and proportionate criteria.

105 Furthermore, where it is necessary to grant individual rights to the use of radio frequencies, those rights must be granted, under the second subparagraph of Article 5(2) of the Authorisation Directive, ‘through open, transparent and non-discriminatory procedures’.

106 Likewise, pursuant to Article 7(3) of the Authorisation Directive, ‘[w]here the granting of rights of use for radio frequencies needs to be limited, Member States shall grant such rights on the basis of selection criteria which must be objective, transparent, non-discriminatory and proportionate’.

107 That requirement is backed up by point 2 of Article 4 of the Competition Directive, under which 'the assignment of radio frequencies for electronic communication services shall be based on objective, transparent, non-discriminatory and proportionate criteria'.

108 In the main proceedings, according to the information supplied by the national court, under Law No 249/1997 the allocation of radio frequencies to a limited number of operators was not carried out in accordance with such criteria.

109 First, those radio frequencies were allocated de facto to the incumbent networks under the transitional arrangements adjusted in Article 3(7) of Law No 249/1997, even though some of those networks had not been granted rights under that Law.

110 Secondly, operators such as Centro Europa 7 were not allocated radio frequencies even though they had been granted rights under that Law.

111 Consequently, irrespective of the objectives pursued by Law No 249/1997 with regard to the system for the grant of radio frequencies to a limited number of operators, the view must be taken that Article 49 EC precluded such a system.

112 The same conclusion must be drawn as regards the system for the grant of radio frequencies to a limited number of operators under Law No 112/2004, in the sense that that scheme was not implemented on the basis of objective, transparent, non-discriminatory and proportionate criteria, in breach of Article 49 EC and, from the date on which they became applicable, Article 9(1) of the Framework Directive, the second subparagraph of Article 5(2) and Article 7(3) of the Authorisation Directive and point 2 of Article 4 of the Competition Directive.

113 Under Law No 112/2004, radio frequencies were granted to the incumbent operators and the latter were authorised to broadcast under the transitional arrangements adjusted in Article 1 of Decree-Law No 352/2003, which merely extended the transitional arrangements set up by Law No 249/1997.

114 In any event, the restrictions established above cannot be justified by the need to ensure a swift transformation to digital television broadcasting.

115 Irrespective of whether such an objective may constitute a general-interest objective capable of justifying such restrictions, it is clear, as the Commission rightly pointed out in the observations which it submitted to the Court, that the Italian legislation, in particular Law No 112/2004, does not merely allocate to the incumbent operators a priority right to obtain radio frequencies, but reserves them that right exclusively, without restricting in time the privileged position assigned to those operators and without providing for any obligation to relinquish the radio frequencies in breach of the threshold after the transfer to digital television broadcasting.

116 Having regard to all of the foregoing considerations, the answer to the second, fourth and fifth questions, taken together, must be that Article 49 EC and, from the date on which they became applicable, Article 9(1) of the Framework Directive, Article 5(1), the second subparagraph of Article 5(2) and Article 7(3) of the Authorisation Directive and Article 4 of the Competition Directive must be interpreted as precluding, in television broadcasting matters, national legislation the application of which makes it impossible for an operator holding rights to broadcast in the absence of broadcasting radio frequencies granted on the basis of objective, transparent, non-discriminatory and proportionate criteria.

The first and third questions

117 By its first question, the national court asks the Court, essentially, to state whether the provisions of Article 10 of the ECHR, in so far as Article 6 EU refers thereto, preclude, in television broadcasting matters, national legislation the application of which makes it impossible for an operator holding rights, such as Centro Europa 7, to broadcast without the grant of broadcasting radio frequencies.

118 By its third question, the national court questions the Court in regard to the obligation, arising from the possible direct effect of Article 17 of the Authorisation Directive from the date on which it became applicable, on the Member State which has granted rights for television broadcasting activity, to bring those rights into line with Community law and, therefore, to allocate to Centro Europa 7 the broadcasting radio frequencies necessary for it to carry on that activity.

119 By those questions, the national court is thus seeking to determine whether there are infringements of Community law for the purpose of ruling on an application for compensation for the losses flowing from such infringements.

120 It follows from the answer to the second, fourth and fifth questions that Article 49 EC and, from the date on which they became applicable, Article 9(1) of the Framework Directive, Article 5(1), the second subparagraph of Article 5(2) and Article 7(3) of the Authorisation Directive and Article 4 of the Competition Directive must be interpreted as precluding, in television broadcasting matters, national legislation the application of which makes it impossible for an operator holding rights to broadcast in the absence of broadcasting radio frequencies granted on the basis of objective, transparent, non-discriminatory and proportionate criteria.

121 That answer, by itself, thus enables the national court to rule on the application made by Centro Europa 7 for compensation for the losses suffered.

122 Consequently, regard being had to the Court's answer to the second, fourth and fifth questions, it is not necessary to rule on the first and third questions.

The sixth, seventh and eighth questions

123 By its sixth, seventh and eighth questions, the national court questions the Court, essentially, in regard to the conditions for the application by the Member States of the derogation laid down in the second subparagraph of Article 5(2) of the Authorisation Directive and Article 4 of the Competition Directive.

124 It follows from the answer to the fourth and fifth questions that, from the date on which they became applicable, the second subparagraph of Article 5(2) of the Authorisation Directive and Article 4 of the Competition Directive must be interpreted as precluding, in television broadcasting matters, national legislation the application of which makes it impossible for an operator holding rights to broadcast in the absence of broadcasting radio frequencies granted on the basis of objective, transparent, non-discriminatory and proportionate criteria.

125 Accordingly, it follows from that reply that compliance with objective, transparent, non-discriminatory and proportionate criteria constitutes a necessary condition for the application of the derogation laid down in the second subparagraph of Article 5(2) of the Authorisation Directive and Article 4 of the Competition Directive.

126 There is therefore no need to rule on any other potential conditions for the application of that derogation, such as those referred to in the sixth, seventh and eighth questions.

127 Consequently, having regard to the Court's answer to the fourth and fifth questions, taken together with the second question, there is no need to give a ruling on the sixth, seventh and eighth questions.

Costs

128 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Fourth Chamber) hereby rules:

Article 49 EC and, from the date on which they became applicable, Article 9(1) of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), Article 5(1), the second subparagraph of Article 5(2) and Article 7(3) of Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive), and Article 4 of Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services must be interpreted as precluding, in television broadcasting matters, national legislation the application of which makes it impossible for an operator holding rights to broadcast in the absence of broadcasting radio frequencies granted on the basis of objective, transparent, non-discriminatory and proportionate criteria.

[Signatures]

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* Language of the case: Italian.

Case C-210/06

Cartesio Oktató és Szolgáltató bt

(Reference for a preliminary ruling from the Szegedi Ítélőtábla)

(Transfer of a company seat to a Member State other than the Member State of incorporation − Application for amendment of the entry regarding the company seat in the commercial register − Refusal − Appeal against a decision of a court entrusted with maintaining the commercial register − Article 234 EC − Reference for a preliminary ruling − Admissibility – Definition of 'court or tribunal' − Definition of 'a court or tribunal against whose decisions there is no judicial remedy under national law' − Appeal against a decision making a reference for a preliminary ruling – Jurisdiction of appellate courts to order revocation of such a decision – Freedom of establishment − Articles 43 EC and 48 EC)

Summary of the Judgment

1. *Preliminary rulings – Reference to the Court – National court or tribunal for the purposes of Article 234 EC – Definition*

   (Art. 234 EC)

2. *Preliminary rulings – Admissibility – Limits*

   (Art. 234 EC)

3. *Preliminary rulings – Reference to the Court – Obligation to refer*

   (Art. 234, third para., EC)

4. *Preliminary rulings – Reference to the Court – Jurisdiction of the national courts*

   (Art. 234 EC)

5. *Freedom of movement for persons – Freedom of establishment*

   (Arts 43 EC and 48 EC)

1. A court hearing an appeal against a decision of a lower court, responsible for maintaining the commercial register, rejecting an application for amendment of information entered in that register, must be classified as a court or tribunal which is entitled to make a reference for a preliminary ruling under Article 234 EC, regardless of the fact that neither the decision of the lower court nor the consideration of the appeal by the referring court takes place in the context of *inter partes* proceedings.

   Where a court responsible for maintaining a register makes an administrative decision without being required to resolve a legal dispute, it cannot be regarded as exercising a judicial function. In contrast, a court hearing an appeal which has been brought against a decision of a lower court responsible for maintaining a register, rejecting such an application, and which seeks the setting aside of that decision, which allegedly adversely affects the rights of the applicant, is called upon to give judgment in a dispute and is exercising a judicial function. Accordingly, in such a case, the appellate court must, in principle, be regarded as a court or tribunal within the meaning of Article 234 EC, with jurisdiction to refer a question to the Court for a preliminary ruling

   (see paras 57-59, 63, operative part 1)

2. There is a presumption of relevance in favour of questions on the interpretation of Community law referred by a national court, and it is a matter for the national court to define, and not for the Court to verify, in which factual and legislative context they operate. The Court declines to rule on a reference for a preliminary ruling from a national court only where it is quite obvious that the interpretation of Community law that is sought is unrelated to the actual facts of the main action or to its purpose, where the problem is hypothetical, or where the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it.

The presumption of relevance is not rebutted by the fact that, in the case of a reference for a preliminary ruling on the question whether a court is to be classified as a court or tribunal against whose decisions there is no judicial remedy under national law, within the meaning of the third paragraph of Article 234 EC, the court has already submitted its reference to the Court. It would be contrary to the spirit of cooperation which must guide all relations between national courts and the Court of Justice, and contrary also to the requirements of procedural economy, to require a national court first to seek a preliminary ruling on the sole question whether that court is one of those referred to in the third paragraph of Article 234 EC, before, where appropriate, having to formulate – not until then and by a second reference for a preliminary ruling – questions concerning the provisions of Community law relating to the substance of the dispute before it.

Nor is that presumption of relevance rebutted where uncertainty exists as to whether the dispute is hypothetical. Such uncertainty exists where the evidence at the Court's disposal for the purpose of ruling on the possible incompatibility with Article 234 EC of a national rule governing appeals against a decision making a reference to the Court does not permit it to be found that that decision was not and can no longer be appealed against and now accordingly has the authority of res judicata, in which case the question of that incompatibility would in fact be hypothetical.

(see paras 67, 70, 73, 83-86)

3. A court whose decisions in disputes may be appealed on points of law, cannot be classified as a court or tribunal against whose decisions there is no judicial remedy under national law, within the meaning of the third paragraph of Article 234 EC, even though the procedural system under which the dispute is to be decided imposes restrictions with regard to the nature of the pleas which may be raised before such a court which must allege a breach of law.

Such restrictions, just as the lack of suspensory effect of the appeal on a point of law, do not have the effect of depriving the parties in a case before a court whose decisions are amenable to such an appeal on a point of law of the possibility of exercising effectively their right to appeal the decision handed down by that court in a dispute. Those restrictions or that lack of suspensory effect do not mean therefore that that court must be classified as a court handing down a decision against which there is no judicial remedy.

(see paras 77-79, operative part 2)

4. Where rules of national law apply relating to the right of appeal against an order for reference, and under those rules the main proceedings remain pending before the referring court in their entirety, the order for reference alone being the subject of a limited appeal, the second paragraph of Article 234 EC is to be interpreted as meaning that the jurisdiction conferred on any national court or tribunal by that provision of the Treaty to make a reference to the Court for a preliminary ruling cannot be called into question by the application of those rules where they permit the appellate court to vary the order for reference, to set aside the reference and to order the referring court to resume the domestic law proceedings.

Although Article 234 EC does not preclude a decision of a court making a reference to the Court from remaining subject to the remedies normally available under national law, nevertheless the outcome of such an appeal cannot limit the jurisdiction conferred by Article 234 EC on that court to make a reference to the Court if it considers that a case pending before it raises questions on the interpretation of provisions of Community law necessitating a ruling by the Court.

In a situation where a case is pending, for the second time, before a court sitting at the first instance after a judgment originally delivered by that court has been quashed by a supreme court, the court at first instance remains free to refer questions to the Court pursuant to Article 234 EC, regardless of the existence of a rule of national law whereby a court is bound on points of law by the rulings of a superior court.

Where rules of national law apply which relate to the right of appeal against a decision making a reference for a preliminary ruling, and under those rules the main proceedings remain pending before the referring court in their entirety, the order for reference alone being the subject of a limited appeal, the autonomous jurisdiction which Article 234 EC confers on the referring court to make a reference to the Court would be called into question, if – by varying the order for reference, by setting it aside and by ordering the referring court to resume the proceedings – the appellate court could prevent the referring court from exercising the right, conferred on it by the EC Treaty, to make a reference to the Court.

In accordance with Article 234 EC, the assessment of the relevance and necessity of the question referred for a preliminary ruling is, in principle, the responsibility of the referring court alone, subject to the limited verification made by the Court. Thus, it is for the referring court to draw the proper inferences from a judgment delivered on an appeal against its decision to refer and, in particular, to come to a conclusion as to whether it is appropriate to maintain the reference for a preliminary ruling, or to amend it or to withdraw it.

It follows that, in a situation where an appeal may be brought against the decision by the referring court to make an order for reference, the Court must – also in the interests of clarity and legal certainty – abide by the decision to make a reference for a preliminary ruling, which must have its full effect so long as it has not been revoked or amended by the referring court, such revocation or amendment being matters on which that court alone is able to take a decision.

(see paras 93-98, operative part 3)

5. As Community law now stands, Articles 43 EC and 48 EC are to be interpreted as not precluding legislation of a Member State under which a company incorporated under the law of that Member State may not transfer its seat to another Member State whilst retaining its status as a company governed by the law of the Member State of incorporation.

In accordance with Article 48 EC, in the absence of a uniform Community law definition of the companies which may enjoy the right of establishment on the basis of a single connecting factor determining the national law applicable to a company, the question whether Article 43 EC applies to a company which seeks to rely on the fundamental freedom enshrined in that article – like the question whether a natural person is a national of a Member State, and hence entitled to enjoy that freedom – is a preliminary matter which, as Community law now stands, can only be resolved by the applicable national law. In consequence, the question whether the company is faced with a restriction on the freedom of establishment, within the meaning of Article 43 EC, can arise only if it has been established, in the light of the conditions laid down in Article 48 EC, that the company actually has a right to that freedom.

Thus a Member State has the power to define both the connecting factor required of a company if it is to be regarded as incorporated under the law of that Member State and, as such, capable of enjoying the right of establishment, and that required if the company is to be able subsequently to maintain that status. That power includes the possibility for that Member State not to permit a company governed by its law to retain that status if the company intends to reorganise itself in another Member State by moving its seat to the territory of the latter, thereby breaking the connecting factor required under the national law of the Member State of incorporation.

Moreover, the legislation and agreements in the field of company law envisaged in Articles 44(2)(g) EC and 293 EC have not as yet addressed the differences between the legislation of the various Member States concerning the place of connection of the companies and thus have not yet brought an end to them. Although certain regulations, such as Regulation No 2137/85 on the European Economic Interest Grouping, Regulation No 2157/2001 on the Statute for a European company and Regulation No 1435/2003 on the Statute for a European Cooperative Society, adopted on the basis of Article 308 EC, in fact lay down a set of rules under which it is possible for the new legal entities which they establish to transfer their registered office (*siège statutaire*) and, accordingly, also their real seat (*siège réel*) – both of which must, in effect, be situated in the same Member State – to another Member State without it being compulsory to wind up the original legal person or to create a new legal person, such a transfer nevertheless necessarily entails a change as regards the national law applicable to the entity making such a transfer.

Where the company merely wishes to transfer its real seat from one Member State to another, while remaining a company governed by national law, hence without any change as to the national law applicable, the application mutatis mutandis of those regulations cannot in any event lead to the predicted result in such circumstances.

(see paras 109-110, 114-115, 117, 119, operative part 4)

JUDGMENT OF THE COURT (Grand Chamber)

16 December 2008 (*)

(Transfer of a company seat to a Member State other than the Member State of incorporation − Application for amendment of the entry regarding the company seat in the commercial register − Refusal − Appeal against a decision of a court entrusted with maintaining the commercial register − Article 234 EC − Reference for a preliminary ruling − Admissibility – Definition of ‘court or tribunal’ − Definition of ‘a court or tribunal against whose decisions there is no judicial remedy under national law’ − Appeal against a decision making a reference for a preliminary ruling – Jurisdiction of appellate courts to order revocation of such a decision – Freedom of establishment − Articles 43 EC and 48 EC)

In Case C-210/06,

REFERENCE for a preliminary ruling under Article 234 EC from the Szegedi Ítélőtábla (Hungary), made by decision of 20 April 2006, received at the Court on 5 May 2006, in the proceedings in the case of

Cartesio Oktató és Szolgáltató bt,

THE COURT (Grand Chamber),

composed of V. Skouris, President, P. Jann, C.W.A. Timmermans (Rapporteur), A. Rosas, K. Lenaerts, A. Ó Caoimh and J.-C. Bonichot, Presidents of Chambers, K. Schiemann, J. Makarczyk, P. Kūris, E. Juhász, L. Bay Larsen and P. Lindh, Judges,

Advocate General: M. Poiares Maduro,

Registrar: B. Fülöp, Administrator,

having regard to the written procedure and further to the hearing on 10 July 2007,

after considering the observations submitted on behalf of:

– CARTESIO Oktató és Szolgáltató bt, by G. Zettwitz and P. Metzinger, ügyvédek,

– the Hungarian Government, by J. Fazekas and P. Szabó, acting as Agents,

– the Czech Government, by T. Boček, acting as Agent,

– Ireland, by D. O'Hagan, acting as Agent, A. Collins SC and N. Travers BL,

– the Netherlands Government, by H.G. Sevenster and M. de Grave, acting as Agents,

– the Polish Government, by E. Ośniecka-Tamecka, acting as Agent,

– the Slovenian Government, by M. Remic, acting as Agent,

– the United Kingdom Government, by T. Harris, acting as Agent, and J. Stratford, Barrister,

– the Commission of the European Communities, by G. Braun and V. Kreuschitz, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 22 May 2008,

gives the following

Judgment

1 This reference for a preliminary ruling concerns the interpretation of Articles 43 EC, 48 EC and 234 EC.

2 The reference was made in the context of proceedings brought by CARTESIO Oktató és Szolgáltató bt ('Cartesio'), a limited partnership established in Baja (Hungary), against the decision rejecting its application for registration in the commercial register of the transfer of its company seat to Italy.

National legal context

The law relating to civil procedure

3 Article 10(2) of Law No III of 1952 on civil procedure (a Polgári perrendtartásról szóló 1952. évi III. törvény: 'the Law on civil procedure') states:

‘At second instance:

…

(b) appeals arising from cases dealt with by regional courts or courts of Budapest shall be heard by appeal courts.’

4 Article 155/A of the Law on civil procedure provides that:

‘(1) The court may ask the Court of Justice of the European Communities for a preliminary ruling in accordance with the rules laid down in the Treaty establishing the European Community.

(2) The court shall make the reference for a preliminary ruling by order and shall stay the proceedings …

(3) An appeal may be brought against a decision to make a reference for a preliminary ruling. An appeal cannot be brought against a decision dismissing a request for a reference for a preliminary ruling.

…’

5 Under Article 233(1) of the Law on civil procedure:

‘Save as otherwise provided, appeal proceedings may be brought against the decisions of courts of first instance …’

6 Article 233/A of that law provides that:

‘An appeal may be brought against orders made at second instance in respect of which a right of appeal exists under the rules applicable to proceedings at first instance …’

7 Article 249/A of the Law on civil procedure states that:

‘Appeal proceedings may also be brought against a decision made at second instance dismissing a request for a reference for a preliminary ruling (Article 155/A).’

8 Article 270 of the Law on civil procedure is worded as follows:

‘(1) Save as otherwise provided, the Legfelsőbb Bíróság [Supreme Court] shall hear appeals on points of law. The general rules shall apply mutatis mutandis.

(2) The parties, interveners and persons affected by the decision may, in respect of the part of that decision which refers to them, bring an appeal on a point of law before the Legfelsőbb Bíróság against final judgments and orders which bring proceedings an end, pleading infringement of the law.

…’

9 Article 271(1) of the Law on civil procedure provides that:

‘No appeal shall lie:

(a) against decisions which have become final at first instance, except in cases which are permitted by law;

(b) where one party has failed to exercise the right to bring an appeal and the court of second instance, hearing the appeal brought by the other party, confirms the decision at first

instance;

…’

10 Under Article 273(3) of that law:

‘The institution of appeal proceedings shall not have suspensory effect but, where a party so requests, the Legfelsőbb Bíróság may exceptionally suspend enforcement of the judgment …’

Company law

11 Article 1(1) of Law No CXLIV of 1997 on commercial companies (a gazdasági társaságokról szóló 1997. évi CXLIV. törvény) provides that:

‘This Law shall govern the incorporation, organisation and functioning of commercial companies which have their seat in Hungary; the rights, duties and responsibilities of the founders and members (shareholders) of those companies; and the conversion, merger and demerger of commercial companies … and their liquidation.’

12 Under Article 11 of that law:

‘The articles of association (the instrument of incorporation, the statutes of the company) shall specify:

(a) the name and seat of the commercial company

…’

13 Article 1(1) of Law No CXLV of 1997 on the commercial register, company advertising and legal procedures in commercial registration matters (a cégnyilvántartásról, a cégnyilvánosságról és a bírósági cégeljárásról szóló 1997. évi CXLV. Törvény; ‘the Law on the commercial register’) provides that:

‘A company is a commercial organisation … or other legal entity of a commercial nature … which, save where a law or government order provides otherwise, is incorporated through its registration in the commercial register for the purpose of carrying on a commercial activity for financial gain …’

14 Under Article 2(1) of that law:

‘The legal entities referred to in Article 1 may be entered in the commercial register only if their registration is possible or compulsory under [Hungarian] law.’

15 Article 11 of the Law on the commercial register provides that:

‘(1) The regional courts or the courts of Budapest, acting as commercial courts, shall register companies in the commercial registers which they are responsible for maintaining …

(2) … the courts within the jurisdiction of which a company has its seat shall have jurisdiction to register that company and to deal with any proceedings concerning such companies provided for by statute.

…’

16 Article 12(1) of that law provides that:

‘The information on companies referred to in this Law shall be entered in the commercial register. For all companies, the register shall specify:

...

(d) the company seat …'

17 Under Article 16(1) of the Law on the commercial register:

'The seat … shall be the place where [the company's] central administration is situated …'

18 Article 29(1) of that law provides that:

'Save as otherwise provided, any application for registration of amendments to information registered in relation to companies must be presented to the commercial court within 30 days of the event giving rise to the amendment.'

19 Article 34(1) of the Law provides that:

'Every transfer of a company seat to the jurisdiction of another court responsible for maintaining the commercial register must, by reason of the change entailed, be submitted to the court with jurisdiction in respect of the former seat. After examining the applications for amendment of the information in the register prior to the change of company seat, the latter court shall endorse the transfer.'

Private international law

20 Article 18 of Decree-Law No 13 of 1979 on private international law rules (a nemzetközi magánjogról szóló 1979. évi 13. törvényerejű rendelet) provides that:

'(1) The legal capacity of a legal person, its commercial status, the rights derived from its personality and the legal relationships between its members shall be determined in accordance with its personal law.

(2) The personal law of a legal person shall be the law of the State in the territory of which it is registered.

(3) If a legal person has been lawfully registered in accordance with the laws of several States or if, under the rules applicable in the place where the seat designated in its articles of association is situated, registration is not required, its personal law shall be that applicable in the State of the seat.

(4) If a legal person has no seat designated in its articles of association or has seats in several States, and, in accordance with the law of one of those States, registration is not required, its personal law shall be the law of the State in which its central administration is situated.'

The dispute in the main proceedings and the questions referred for a preliminary ruling

21 Cartesio was formed on 20 May 2004 as a 'betéti társaság' (limited partnership) under Hungarian law. Its seat was established in Baja (Hungary). Cartesio was registered in the commercial register on 11 June 2004.

22 Cartesio has two partners both of whom are natural persons resident in Hungary and holding Hungarian nationality: a limited partner, whose only commitment is to invest capital, and an unlimited partner, with unlimited liability for the company's debts. Cartesio is active, inter alia, in the field of human resources, secretarial activities, translation, teaching and training.

23 On 11 November 2005, Cartesio filed an application with the Bács-Kiskun Megyei Bíróság

(Regional Court, Bács-Kiskun), sitting as a cégbíróság (commercial court), for registration of the transfer of its seat to Gallarate (Italy) and, in consequence, for amendment of the entry regarding Cartesio's company seat in the commercial register.

24 By decision of 24 January 2006, that application was rejected on the ground that the Hungarian law in force did not allow a company incorporated in Hungary to transfer its seat abroad while continuing to be subject to Hungarian law as its personal law.

25 Cartesio lodged an appeal against that decision with the Szegedi Ítélőtábla (Regional Court of Appeal, Szeged).

26 Relying on the judgment in Case C-411/03 *SEVIC Systems* [2005] ECR I-10805, Cartesio claimed before the Szegedi Ítélőtábla that, to the extent that Hungarian law draws a distinction between commercial companies according to the Member State in which they have their seat, that law is contrary to Articles 43 EC and 48 EC. It follows from those articles that Hungarian law cannot require Hungarian companies to choose to establish their seat in Hungary.

27 Cartesio also maintained that the Szegedi Ítélőtábla was required to refer that question for a preliminary ruling, since it constitutes a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law.

28 The Szegedi Ítélőtábla points out that, under Hungarian law, proceedings before the courts responsible for maintaining the commercial register and before courts hearing appeals against decisions of the commercial register courts are not *inter partes*. It therefore wishes to know whether it may be classified as a 'court or tribunal' within the meaning of Article 234 EC.

29 Moreover, if the answer to this question is in the affirmative, the Szegedi Ítélőtábla is of the view that it is still unclear whether, for the purposes of the third paragraph of Article 234 EC, it should be classified as a court or tribunal against whose decisions there is no judicial remedy under national law.

30 It states in that regard that although, according to Hungarian law, its decisions on appeal are final and enforceable, they may nevertheless be the subject of an extraordinary appeal – an appeal on a point of law – before the Legfelsőbb Bíróság.

31 However, as the purpose of an appeal on a point of law is to ensure the consistency of case-law, the possibility of bringing such an appeal is limited, in particular by the condition governing the admissibility of pleas, which is linked to the obligation to allege a breach of law.

32 The Szegedi Ítélőtábla further notes that, in Hungarian academic legal writing and case-law, questions have been raised as to the compatibility with Article 234 EC of the provisions laid down in Articles 155/A and 249/A of the Law on civil procedure concerning appeals against decisions by which a question is referred to the Court of Justice for a preliminary ruling.

33 In that regard, the Szegedi Ítélőtábla points out that those provisions might result in an appellate court preventing a court which has decided to make a reference to the Court from doing so, even though an interpretation by the Court of a provision of Community law is needed to resolve the dispute in the main proceedings.

34 As regards the merits of the case before it, the Szegedi Ítélőtábla, referring to the judgment in Case 81/87 *Daily Mail and General Trust* [1988] ECR 5483, notes that the freedom of establishment laid down in Articles 43 EC and 48 EC does not include the right, for a company incorporated under the legislation of a Member State and registered therein, to transfer its central administration, and thus its principal place of business, to another Member State whilst retaining its legal personality and nationality of origin, should the competent authorities object to this.

35 However, according to the Szegedi Ítélőtábla, this principle may have been further refined in the

later case-law of the Court.

36 In that regard, the Szegedi Ítélőtábla points out that, according to the case-law of the Court, all measures which prohibit, impede or render less attractive the exercise of the freedom of establishment constitute a restriction on that freedom, and it refers in that regard, inter alia, to Case C-442/02 *CaixaBank France* [2004] ECR I-8961, paragraphs 11 and 12).

37 The Szegedi Ítélőtábla moreover points out that, in *SEVIC Systems*, the Court ruled that Articles 43 EC and 48 EC preclude registration in the national commercial register of the merger by dissolution without liquidation of one company and transfer of the whole of its assets to another company from being refused in general in a Member State where one of the two companies is established in another Member State, whereas such registration is possible, on compliance with certain conditions, where the two companies participating in the merger are both established in the territory of the first Member State.

38 Moreover, it is settled case-law of the Court that national laws cannot differentiate between companies according to the nationality of the person seeking their registration in the commercial register.

39 Lastly, the Szegedi Ítélőtábla states that Council Regulation (EEC) No 2137/85 of 25 July 1985 on the European Economic Interest Grouping (EEIG) (OJ 1985 L 199, p. 1) and Council Regulation (EC) No 2157/2001 of 8 October 2001 on the Statute for a European company (SE) (OJ 2001 L 294, p. 1) lay down, for the forms of Community undertaking which they introduce, more flexible and less costly provisions which enable those undertakings to transfer their seat or establishment from one Member State to another without first going into liquidation.

40 In those circumstances, on the view that resolution of the dispute before it depended on the interpretation of Community law, the Szegedi Ítélőtábla decided to stay proceedings and to refer the following questions to the Court for a preliminary ruling:

‘(1) Is a court of second instance which has to give a decision on an appeal against a decision of a commercial court (cégbíróság) in proceedings to amend a registration [of a company] entitled to make a reference for a preliminary ruling under Article 234 [EC], where neither the action before the commercial court nor the appeal procedure is *inter partes*?

(2) In so far as an appeal court is included in the concept of a “court or tribunal which is entitled to make a reference for a preliminary ruling” under Article 234 [EC], must that court be regarded as a court against whose decisions there is no judicial remedy, which has an obligation, under Article 234 [EC], to submit questions on the interpretation of Community law to the Court of Justice of the European Communities?

(3) Does a national measure which, in accordance with domestic law, confers a right to bring an appeal against an order making a reference for a preliminary ruling limit the power of the Hungarian courts to refer questions for a preliminary ruling or could it limit that power – derived directly from Article 234 [EC] – if, in appeal proceedings, the national superior court may amend the order, render the request for a preliminary ruling inoperative and order the court which issued the order for reference to resume the national proceedings which had been suspended?

(4) (a) If a company, [incorporated] in Hungary under Hungarian company law and entered in the Hungarian commercial register, wishes to transfer its seat to another Member State of the European Union, is the regulation of this field within the scope of Community law or, in the absence of the harmonisation of laws, is national law exclusively applicable?

(b) May a Hungarian company request transfer of its seat to another Member State of the European Union relying directly on Community law (Articles 43 [EC] and 48

[EC])? If the answer is affirmative, may the transfer of the seat be made subject to any kind of condition or authorisation by the Member State of origin or the host Member State?

(c) May Articles 43 [EC] and 48 [EC] be interpreted as meaning that national rules or national practices which differentiate between commercial companies with respect to the exercise of their rights, according to the Member State in which their seat is situated, are incompatible with Community law?

[(d)] May Articles 43 [EC] and 48 [EC] be interpreted as meaning that, in accordance with those articles, national rules or practices which prevent a Hungarian company from transferring its seat to another Member State of the European Union are incompatible with Community law?'

The application to have the oral procedure reopened

41 By document lodged at the Registry of the Court of Justice on 9 September 2008, Ireland requested the Court to order that the oral procedure be reopened, pursuant to Article 61 of the Rules of Procedure, with regard to the fourth question referred for a preliminary ruling.

42 In support of its request, Ireland states that, contrary to the view adopted by the Advocate General in his Opinion, the fourth question in the order for reference should not be understood as relating to the transfer of the seat, defined by Hungarian law as the place where the company has its central administration, and thus the real seat (*siège réel*) of the company.

43 According to Ireland, it follows from the English translation of the order for reference that that question concerns the transfer of the registered office (*siège statutaire*).

44 Thus, Ireland claims essentially that one of the factual premisses on which the Advocate General's analysis is based is incorrect.

45 Ireland is, moreover, of the view that, if the Court relies on the same premiss, it should reopen the oral procedure in order to give the interested parties an opportunity to submit observations on the basis of that premiss.

46 It is clear from the case-law that the Court may of its own motion, or on a proposal from the Advocate General, or at the request of the parties, order the reopening of the oral procedure in accordance with Article 61 of the Rules of Procedure if it considers that it lacks sufficient information or that the case must be dealt with on the basis of an argument which has not been debated between the parties (see, inter alia, Case C-284/06 *Burda* [2008] ECR I-0000, paragraph 37 and the case-law cited).

47 In that regard, it should be pointed out, first, that it is apparent from the order for reference as a whole that the fourth question relates not to the transfer of the registered office of the company concerned in the main proceedings but to the transfer of its 'real seat'.

48 As stated in the order for reference, it follows from the Hungarian legislation on company registration that, for the purposes of applying that legislation, a company's seat is defined as the place where it has its central administration.

49 Moreover, the referring court placed the case before it in the context of the situation at issue in *Daily Mail and General Trust*, which it describes as relating to a company, incorporated in accordance with the legislation of a Member State and registered therein, wishing to transfer its central administration, and thus its principal place of business, to another Member State whilst retaining its legal personality and nationality of origin, where the competent authorities object to this. More specifically, the referring court asks whether the principle laid down in that judgment – that Articles 43 EC and 48 EC do not confer on companies the right to transfer their central

administration in such a way, whilst retaining their legal personality as conferred on them in the State under whose laws they were incorporated – has been further refined in the later case-law of the Court.

50 Secondly, the interested parties, including Ireland, were expressly requested by the Court to focus their pleadings on the premiss that the issue raised in the main proceedings related to the transfer to another Member State of the real seat of the company concerned, in other words, of the place where it has its administrative seat.

51 Although Ireland nevertheless focused in its pleadings on the premiss that the issue in the case before the referring court concerned the transfer of a company's registered office, it also set out its position – albeit briefly – on the basis that that issue concerned the transfer of the company's real seat, a position which, moreover, it set out again in its request that the oral procedure be reopened.

52 Against that background, the Court, having heard the Advocate General, considers that it has all the evidence necessary to enable it to reply to the questions referred and that the present case does not thereby fall to be decided on the basis of an argument which has not been debated between the parties.

53 Accordingly, it is not necessary to order that the oral procedure be reopened.

The questions referred for a preliminary ruling

The first question

54 By this question, the Court is essentially asked whether a court such as the referring court, hearing an appeal against a decision of a lower court, responsible for maintaining the commercial register, rejecting an application for amendment of information entered in that register, must be classified as a court or tribunal which is entitled to make a reference for a preliminary ruling under Article 234 EC, regardless of the fact that neither the decision of the lower court nor the consideration by the referring court of the appeal against that decision takes place in the context of *inter partes* proceedings.

55 In that regard, it should be borne in mind that, according to settled case-law, in order to determine whether the body making a reference is a 'court or tribunal' for the purposes of Article 234 EC, which is a question governed by Community law alone, the Court takes account of a number of factors, such as whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is *inter partes*, whether it applies rules of law and whether it is independent (see, inter alia, Case C-96/04 *Standesamt Stadt Niebüll* [2006] ECR I-3561, paragraph 12 and the case-law cited).

56 With regard to the *inter partes* nature of the proceedings before the national court, Article 234 EC does not make reference to the Court subject to those proceedings being *inter partes*. None the less, it follows from that article that a national court may make a reference to the Court only if there is a case pending before it and if it is called upon to give judgment in proceedings intended to lead to a decision of a judicial nature (see to that effect, inter alia, Case C-182/00 *Lutz and Others* [2002] ECR I-547, paragraph 13 and the case-law cited).

57 Thus, where a court responsible for maintaining a register makes an administrative decision without being required to resolve a legal dispute, it cannot be regarded as exercising a judicial function. Such is the case, for example, where it decides an application for registration of a company in proceedings which do not have as their object the annulment of a measure which allegedly adversely affects the applicant (see to that effect, inter alia, *Lutz and Others*, paragraph 14 and the case-law cited).

58 In contrast, a court hearing an appeal which has been brought against a decision of a lower

court responsible for maintaining a register, rejecting such an application, and which seeks the setting-aside of that decision, which allegedly adversely affects the rights of the applicant, is called upon to give judgment in a dispute and is exercising a judicial function.

59 Accordingly, in such a case, the appellate court must, in principle, be regarded as a court or tribunal within the meaning of Article 234 EC, with jurisdiction to refer a question to the Court for a preliminary ruling (see for similar situations, inter alia, Case C-300/01 *Salzmann* [2003] ECR I-4899; *SEVIC Systems*; and Case C-117/06 *Möllendorf and Others* [2007] ECR I-8361).

60 It is apparent from the court file that, in the main proceedings, the referring court is sitting in an appellate capacity in an action for the setting-aside of a decision by which a lower court, responsible for maintaining the commercial register, rejected an application by a company for registration of the transfer of its seat, requiring the amendment of an entry in that register.

61 Accordingly, in the main proceedings, the referring court is hearing a dispute and is exercising a judicial function, regardless of the fact that the proceedings before that court are not *inter partes*.

62 Consequently, in the light of the case-law cited in paragraphs 55 and 56 above, the referring court must be regarded as a court or tribunal for the purposes of Article 234 EC.

63 In the light of the foregoing, the answer to the first question must be that a court such as the referring court, hearing an appeal against a decision of a lower court, responsible for maintaining the commercial register, rejecting an application for amendment of information entered in that register, must be classified as a court or tribunal which is entitled to make a reference for a preliminary ruling under Article 234 EC, regardless of the fact that neither the decision of the lower court nor the consideration of the appeal by the referring court takes place in the context of *interpartes* proceedings.

The second question

64 By this question, the Court is essentially being asked whether a court such as the referring court, whose decisions in disputes such as that in the main proceedings may be appealed on points of law, falls to be classified as a court or tribunal against whose decisions there is no judicial remedy under national law, within the meaning of the third paragraph of Article 234 EC.

Admissibility

65 The Commission of the European Communities contends that this question is inadmissible as it is manifestly irrelevant to the resolution of the dispute in the main proceedings, since the order for reference has already been submitted to the Court, rendering any examination of whether there is an obligation to make a reference devoid of interest.

66 That objection must be rejected.

67 According to settled case-law, there is a presumption of relevance in favour of questions on the interpretation of Community law referred by a national court, and it is a matter for the national court to define, and not for the Court to verify, in which factual and legislative context they operate. The Court declines to rule on a reference for a preliminary ruling from a national court only where it is quite obvious that the interpretation of Community law that is sought is unrelated to the actual facts of the main action or to its purpose, where the problem is hypothetical, or where the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it (see, to that effect, Joined Cases C-222/05 to C-225/05 *van der Weerd and Others* [2007] ECR I-4233, paragraph 22 and the case-law cited).

68 As stated in paragraph 27 above, Cartesio claimed before the referring court that that court was required to make a reference to the Court for a preliminary ruling, since it fell to be classified as a court or tribunal against whose decisions there is no judicial remedy under national law, within

the meaning of the third paragraph of Article 234 EC.

69 As the referring court had doubts concerning that plea, it decided to refer a question on that issue to the Court for a preliminary ruling.

70 It would be contrary to the spirit of cooperation which must guide all relations between national courts and the Court of Justice, and contrary also to the requirements of procedural economy, to require a national court first to seek a preliminary ruling on the sole question whether that court is one of those referred to in the third paragraph of Article 234 EC, before, where appropriate, having to formulate – subsequently and by a second reference for a preliminary ruling – the questions concerning the provisions of Community law relating to the substance of the dispute before it.

71 Moreover, the Court has already replied to a question relating to the characteristics of national courts in the light of the third paragraph of Article 234 EC in a context offering certain similarities with that of the present reference for a preliminary ruling, without the admissibility of that question being disputed (Case C-99/00 *Lyckeskog* [2002] ECR I-4839).

72 In those circumstances, it does not appear – at least not prima facie – that the interpretation of Community law sought is unrelated to the actual facts of the main action or to its purpose.

73 Accordingly, the presumption of relevance in favour of references for a preliminary ruling is not, as regards the present question, rebutted by the objection put forward by the Commission (see, inter alia, *van der Weerd and Others*, paragraphs 22 and 23).

74 It follows that the second question is admissible.

Substance

75 The issue raised by this question is thus whether the referring court falls to be classified as ‘a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law’, within the meaning of the third paragraph of Article 234 EC. It is clear from the order for reference that this question is raised in view of the fact, referred to in paragraphs 30 and 31 above, that, although Hungarian law provides that decisions delivered on appeal by the referring court may be the subject of an extraordinary appeal – in other words, an appeal on a point of law before the Legfelsőbb Bíróság, the purpose of which is to ensure the consistency of the case-law – the possibilities of bringing such an appeal are limited, in particular, by the condition governing the admissibility of pleas, which is linked to the obligation to allege a breach of law, and in view of the fact, also pointed out in the order for reference, that under Hungarian law an appeal on a point of law does not, in principle, have the effect of suspending enforcement of the decision delivered on appeal.

76 The Court has already held that decisions of a national appellate court which can be challenged by the parties before a supreme court are not decisions of ‘a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law’ within the meaning of the third paragraph of Article 234 EC. The fact that the examination of the merits of such challenges is conditional upon a preliminary declaration of admissibility by the supreme court does not have the effect of depriving the parties of a judicial remedy (*Lyckeskog*, paragraph 16).

77 That is true a fortiori in the case of a procedural system such as that under which the case before the referring court must be decided, since that system makes no provision for a preliminary declaration by the supreme court that the appeal is admissible and, instead, merely imposes restrictions with regard, in particular, to the nature of the pleas which may be raised before such a court, which must allege a breach of law.

78 In common with the lack of suspensory effect of appeals on a point of law before the Legfelsőbb Bíróság, such restrictions do not have the effect of depriving the parties in a case before a court whose decisions are amenable to an appeal on a point of law of the possibility of

exercising effectively their right to appeal the decision handed down by that court in a dispute such as that in the main proceedings. It does not follow, therefore, from those restrictions or from the lack of suspensory effect that that court falls to be classified as a court handing down a decision against which there is no judicial remedy.

79 In the light of the foregoing, the answer to the second question must be that a court such as the referring court, whose decisions in disputes such as that in the main proceedings may be appealed on points of law, cannot be classified as a court or tribunal against whose decisions there is no judicial remedy under national law, within the meaning of the third paragraph of Article 234 EC.

The third question

Admissibility

80 Ireland argues that this question is hypothetical, hence inadmissible, since no appeal on a point of law has been brought against the order for reference and, in consequence, an answer to that question would be of no use to the referring court.

81 The Commission also asks the Court to declare that it is not appropriate to give a reply to the third question because, given that the order for reference has the authority of *res judicata* and has reached the Court, that question is hypothetical.

82 Those objections cannot be upheld.

83 As was pointed out in paragraph 67 above, the presumption of relevance enjoyed by references for a preliminary ruling may, in certain circumstances, be rebutted, in particular where the Court holds that the problem is hypothetical.

84 Ireland and the Commission maintain that the problem raised by this question – the possible incompatibility with the second paragraph of Article 234 EC of national rules governing appeals against a decision making a reference to the Court – is hypothetical, since, in fact, the order for reference has not been appealed against and now has the authority of *res judicata*.

85 However, neither that decision nor the file sent to the Court permits the inference that there has been no appeal against that decision or that there can no longer be any appeal against it.

86 In the light of the settled case-law cited in paragraph 67 above, since, in such a situation of uncertainty, responsibility for defining and verifying the factual and legislative context in which the question referred arises lies with the national court, the presumption of relevance which this question enjoys has not been rebutted.

87 It follows that the third question is admissible.

Substance

88 Article 234 EC gives national courts the right – and, where appropriate, imposes on them the obligation – to make a reference for a preliminary ruling, as soon as the national court perceives either of its own motion or at the request of the parties that the substance of the dispute raises one of the points referred to in the first paragraph of Article 234 EC. It follows that national courts have the widest discretion in referring matters to the Court if they consider that a case pending before them raises questions involving interpretation of provisions of Community law, or consideration of their validity, necessitating a decision on their part (Case 166/73 *Rheinmühlen-Düsseldorf* [1974] ECR 33, paragraph 3).

89 It is also clear from the case-law of the Court that, in the case of a court or tribunal against whose decisions there is a judicial remedy under national law, Article 234 EC does not preclude decisions of such a court by which questions are referred to the Court for a preliminary ruling

from remaining subject to the remedies normally available under national law. Nevertheless, in the interests of clarity and legal certainty, the Court must abide by the decision to refer, which must have its full effect so long as it has not been revoked (Case 146/73 *Rheinmühlen-Düsseldorf* [1974] ECR 139, paragraph 3).

90 Moreover, the Court has already held that the system established by Article 234 EC with a view to ensuring that Community law is interpreted uniformly throughout the Member States instituted direct cooperation between the Court of Justice and the national courts by means of a procedure which is completely independent of any initiative by the parties (Case C-2/06 *Kempter* [2008] ECR I-411, paragraph 41).

91 The system of references for a preliminary ruling is based on a dialogue between one court and another, the initiation of which depends entirely on the national court's assessment as to whether a reference is appropriate and necessary (*Kempter*, paragraph 42).

92 It is clear from the order for reference that, under Hungarian law, a separate appeal may be brought against a decision making a reference to the Court for a preliminary ruling, although the main proceedings remain pending in their entirety before the referring court, proceedings being stayed until the Court gives a ruling. The appellate court thus seised has, under Hungarian law, power to vary that decision, to set aside the reference for a preliminary ruling and to order the first court to resume the domestic law proceedings.

93 As is clear from the case-law cited in paragraphs 88 and 89 above, concerning a national court or tribunal against whose decisions there is a judicial remedy under national law, Article 234 EC does not preclude a decision of such a court, making a reference to the Court, from remaining subject to the remedies normally available under national law. Nevertheless, the outcome of such an appeal cannot limit the jurisdiction conferred by Article 234 EC on that court to make a reference to the Court if it considers that a case pending before it raises questions on the interpretation of provisions of Community law necessitating a ruling by the Court.

94 It should be pointed out, moreover, that the Court has already held that, in a situation where a case is pending, for the second time, before a court sitting at first instance after a judgment originally delivered by that court has been quashed by a supreme court, the court at first instance remains free to refer questions to the Court pursuant to Article 234 EC, regardless of the existence of a rule of national law whereby a court is bound on points of law by the rulings of a superior court (Case 146/73 *Rheinmühlen-Düsseldorf*).

95 Where rules of national law apply which relate to the right of appeal against a decision making a reference for a preliminary ruling, and under those rules the main proceedings remain pending before the referring court in their entirety, the order for reference alone being the subject of a limited appeal, the autonomous jurisdiction which Article 234 EC confers on the referring court to make a reference to the Court would be called into question, if – by varying the order for reference, by setting it aside and by ordering the referring court to resume the proceedings – the appellate court could prevent the referring court from exercising the right, conferred on it by the EC Treaty, to make a reference to the Court.

96 In accordance with Article 234 EC, the assessment of the relevance and necessity of the question referred for a preliminary ruling is, in principle, the responsibility of the referring court alone, subject to the limited verification made by the Court in accordance with the case-law cited in paragraph 67 above. Thus, it is for the referring court to draw the proper inferences from a judgment delivered on an appeal against its decision to refer and, in particular, to come to a conclusion as to whether it is appropriate to maintain the reference for a preliminary ruling, or to amend it or to withdraw it.

97 It follows that, in a situation such as that in the case before the referring court, the Court must – also in the interests of clarity and legal certainty – abide by the decision to make a reference for a preliminary ruling, which must have its full effect so long as it has not been revoked or amended by the referring court, such revocation or amendment being matters on which that

court alone is able to take a decision.

98 In the light of the foregoing, the answer to the third question must be that, where rules of national law apply which relate to the right of appeal against a decision making a reference for a preliminary ruling, and under those rules the main proceedings remain pending before the referring court in their entirety, the order for reference alone being the subject of a limited appeal, the second paragraph of Article 234 EC is to be interpreted as meaning that the jurisdiction conferred by that provision of the Treaty on any national court or tribunal to make a reference to the Court for a preliminary ruling cannot be called into question by the application of those rules, where they permit the appellate court to vary the order for reference, to set aside the reference and to order the referring court to resume the domestic law proceedings.

The fourth question

99 By its fourth question, the referring court essentially asks whether Articles 43 EC and 48 EC are to be interpreted as precluding legislation of a Member State under which a company incorporated under the law of that Member State may not transfer its seat to another Member State whilst retaining its status as a company governed by the law of the Member State of incorporation.

100 It is clear from the order for reference that Cartesio – a company which was incorporated in accordance with Hungarian legislation and which, at the time of its incorporation, established its seat in Hungary – transferred its seat to Italy but wished to retain its status as a company governed by Hungarian law.

101 Under the Hungarian Law on the commercial register, the seat of a company governed by Hungarian law is to be the place where its central administration is situated.

102 The referring court states that the application filed by Cartesio for amendment of the entry in the commercial register regarding its company seat was rejected by the court responsible for maintaining that register on the ground that, under Hungarian law, a company incorporated in Hungary may not transfer its seat, as defined by the Law on the commercial register, abroad while continuing to be subject to Hungarian law as the law governing its articles of association.

103 Such a transfer would require, first, that the company cease to exist and, then, that the company reincorporate itself in compliance with the law of the country where it wishes to establish its new seat.

104 In that regard, the Court observed in paragraph 19 of *Daily Mail and General Trust* that companies are creatures of national law and exist only by virtue of the national legislation which determines its incorporation and functioning.

105 In paragraph 20 of *Daily Mail and General Trust*, the Court stated that the legislation of the Member States varies widely in regard to both the factor providing a connection to the national territory required for the incorporation of a company and the question whether a company incorporated under the legislation of a Member State may subsequently modify that connecting factor. Certain States require that not merely the registered office but also the real seat (*siège réel*) – that is to say, the central administration of the company – should be situated in their territory, and the removal of the central administration from that territory thus presupposes the winding-up of the company with all the consequences that winding-up entails under company law. The legislation of other States permits companies to transfer their central administration to a foreign country but certain of them make that right subject to certain restrictions, and the legal consequences of a transfer vary from one Member State to another.

106 The Court added, in paragraph 21 of *Daily Mail and General Trust*, that the EEC Treaty had taken account of that variety in national legislation. In defining, in Article 58 of that Treaty (later Article 58 of the EC Treaty, now Article 48 EC), the companies which enjoy the right of establishment, the EEC Treaty placed on the same footing, as connecting factors, the

registered office, central administration and principal place of business of a company.

107 In Case C-208/00 *Überseering* [2002] ECR I-9919, paragraph 70, the Court, whilst confirming those dicta, inferred from them that the question whether a company formed in accordance with the legislation of one Member State can transfer its registered office or its actual centre of administration to another Member State without losing its legal personality under the law of the Member State of incorporation, and, in certain circumstances, the rules relating to that transfer, are determined by the national law in accordance with which the company was incorporated. The Court concluded that a Member State is able, in the case of a company incorporated under its law, to make the company's right to retain its legal personality under the law of that Member State subject to restrictions on the transfer to a foreign country of the company's actual centre of administration.

108 It should be pointed out, moreover, that the Court also reached that conclusion on the basis of the wording of Article 58 of the EEC Treaty. In defining, in that article, the companies which enjoy the right of establishment, the EEC Treaty regarded the differences in the legislation of the various Member States both as regards the required connecting factor for companies subject to that legislation and as regards the question whether — and, if so, how — the registered office (*siège statutaire*) or real seat (*siège réel*) of a company incorporated under national law may be transferred from one Member State to another as problems which are not resolved by the rules concerning the right of establishment, but which must be dealt with by future legislation or conventions (see, to that effect, *Daily Mail and General Trust*, paragraphs 21 to 23, and *Überseering*, paragraph 69).

109 Consequently, in accordance with Article 48 EC, in the absence of a uniform Community law definition of the companies which may enjoy the right of establishment on the basis of a single connecting factor determining the national law applicable to a company, the question whether Article 43 EC applies to a company which seeks to rely on the fundamental freedom enshrined in that article – like the question whether a natural person is a national of a Member State, hence entitled to enjoy that freedom – is a preliminary matter which, as Community law now stands, can only be resolved by the applicable national law. In consequence, the question whether the company is faced with a restriction on the freedom of establishment, within the meaning of Article 43 EC, can arise only if it has been established, in the light of the conditions laid down in Article 48 EC, that the company actually has a right to that freedom.

110 Thus a Member State has the power to define both the connecting factor required of a company if it is to be regarded as incorporated under the law of that Member State and, as such, capable of enjoying the right of establishment, and that required if the company is to be able subsequently to maintain that status. That power includes the possibility for that Member State not to permit a company governed by its law to retain that status if the company intends to reorganise itself in another Member State by moving its seat to the territory of the latter, thereby breaking the connecting factor required under the national law of the Member State of incorporation.

111 Nevertheless, the situation where the seat of a company incorporated under the law of one Member State is transferred to another Member State with no change as regards the law which governs that company falls to be distinguished from the situation where a company governed by the law of one Member State moves to another Member State with an attendant change as regards the national law applicable, since in the latter situation the company is converted into a form of company which is governed by the law of the Member State to which it has moved.

112 In fact, in that latter case, the power referred to in paragraph 110 above, far from implying that national legislation on the incorporation and winding-up of companies enjoys any form of immunity from the rules of the EC Treaty on freedom of establishment, cannot, in particular, justify the Member State of incorporation, by requiring the winding-up or liquidation of the company, in preventing that company from converting itself into a company governed by the law of the other Member State, to the extent that it is permitted under that law to do so.

113 Such a barrier to the actual conversion of such a company, without prior winding-up or liquidation, into a company governed by the law of the Member State to which it wishes to relocate constitutes a restriction on the freedom of establishment of the company concerned which, unless it serves overriding requirements in the public interest, is prohibited under Article 43 EC (see to that effect, inter alia, *CaixaBank France*, paragraphs 11 and 17).

114 It should also be noted that, following the judgments in *Daily Mail and General Trust* and *Überseering*, the developments in the field of company law envisaged in Articles 44(2)(g) EC and 293 EC, respectively, as pursued by means of legislation and agreements, have not as yet addressed the differences, referred to in those judgments, between the legislation of the various Member States and, accordingly, have not yet eradicated those differences.

115 The Commission maintains, however, that the absence of Community legislation in this field – noted by the Court in paragraph 23 of *Daily Mail and General Trust* – was remedied by the Community rules, governing the transfer of the company seat to another Member State, laid down in regulations such as Regulation No 2137/85 on the EEIG and Regulation No 2157/2001 on the SE or, moreover, Council Regulation (EC) No 1435/2003 of 22 July 2003 on the Statute for a European cooperative society (SCE) (OJ 2003 L 207, p. 1), as well as by the Hungarian legislation adopted subsequent to those regulations.

116 The Commission argues that those rules may – and should – be applied mutatis mutandis to the cross-border transfer of the real seat of a company incorporated under the law of a Member State.

117 In that regard, it should be noted that although those regulations, adopted on the basis of Article 308 EC, in fact lay down a set of rules under which it is possible for the new legal entities which they establish to transfer their registered office (*siège statutaire*) and, accordingly, also their real seat (*siège réel*) – both of which must, in effect, be situated in the same Member State – to another Member State without it being compulsory to wind up the original legal person or to create a new legal person, such a transfer nevertheless necessarily entails a change as regards the national law applicable to the entity making such a transfer.

118 That is clear, for example, in the case of a European company, from Articles 7 to 9(1)(c)(ii) of Regulation No 2157/2001.

119 As it is, in the case before the referring court, Cartesio merely wishes to transfer its real seat from Hungary to Italy, while remaining a company governed by Hungarian law, hence without any change as to the national law applicable.

120 Accordingly, the application mutatis mutandis of the Community legislation to which the Commission refers – even if it were to govern the cross-border transfer of the seat of a company governed by the law of a Member State – cannot in any event lead to the predicted result in circumstances such as those of the case before the referring court.

121 Further, as regards the implications of *SEVIC Systems* for the principle established in *Daily Mail and General Trust* and *Überseering*, it should be pointed out that those judgments do not relate to the same problem and that, consequently, *SEVIC Systems* cannot be said to have qualified the scope of *Daily Mail and General Trust* or *Überseering*.

122 The case which gave rise to the judgment in *SEVIC Systems* concerned the recognition, in the Member State of incorporation of a company, of an establishment operation carried out by that company in another Member State by means of a cross-border merger, which is a situation fundamentally different from the circumstances at issue in the case which gave rise to the judgment in *Daily Mail and General Trust*, but similar to the situations considered in other judgments of the Court (see Case C-212/97 *Centros* [1999] ECR I-1459; *Überseering*; and Case C-167/01 *InspireArt* [2003] ECR I-10155).

123 In such situations, the issue which must first be decided is not the question, referred to in

paragraph 109 above, whether the company concerned may be regarded as a company which possesses the nationality of the Member State under whose legislation it was incorporated but, rather, the question whether or not that company – which, it is common ground, is a company governed by the law of a Member State – is faced with a restriction in the exercise of its right of establishment in another Member State.

124 In the light of all the foregoing, the answer to the fourth question must be that, as Community law now stands, Articles 43 EC and 48 EC are to be interpreted as not precluding legislation of a Member State under which a company incorporated under the law of that Member State may not transfer its seat to another Member State whilst retaining its status as a company governed by the law of the Member State of incorporation.

Costs

125 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

1. **A court such as the referring court, hearing an appeal against a decision of a lower court, responsible for maintaining the commercial register, rejecting an application for amendment of information entered in that register, must be classified as a court or tribunal which is entitled to make a reference for a preliminary ruling under Article 234 EC, regardless of the fact that neither the decision of the lower court nor the consideration of the appeal by the referring court takes place in the context of *inter partes* proceedings.**

2. **A court such as the referring court, whose decisions in disputes such as that in the main proceedings may be appealed on points of law, cannot be classified as a court or tribunal against whose decisions there is no judicial remedy under national law, within the meaning of the third paragraph of Article 234 EC.**

3. **Where rules of national law apply which relate to the right of appeal against a decision making a reference for a preliminary ruling, and under those rules the main proceedings remain pending before the referring court in their entirety, the order for reference alone being the subject of a limited appeal, the second paragraph of Article 234 EC is to be interpreted as meaning that the jurisdiction conferred on any national court or tribunal by that provision of the Treaty to make a reference to the Court for a preliminary ruling cannot be called into question by the application of those rules, where they permit the appellate court to vary the order for reference, to set aside the reference and to order the referring court to resume the domestic law proceedings.**

4. **As Community law now stands, Articles 43 EC and 48 EC are to be interpreted as not precluding legislation of a Member State under which a company incorporated under the law of that Member State may not transfer its seat to another Member State whilst retaining its status as a company governed by the law of the Member State of incorporation.**

[Signatures]

* Language of the case: Hungarian.

JUDGMENT OF THE COURT (Third Chamber)

22 October 2009 (*)

(Visas, asylum and immigration – Measures concerning the crossing of external borders – Article 62(1) and (2)(a) EC – Convention implementing the Schengen Agreement – Articles 6b and 23 – Regulation (EC) No 562/2006 – Articles 5, 11 and 13 – Presumption concerning the duration of the stay – Unlawful presence of third-country nationals on the territory of a Member State – National legislation allowing for either a fine or expulsion, depending on the circumstances)

In Joined Cases C-261/08 and C-348/08,

REFERENCES for preliminary rulings under Articles 68 EC and 234 EC from the Tribunal Superior de Justicia de Murcia (Spain), made by decisions of 12 June and 22 July 2008, received at the Court on 19 June and 30 July 2008 respectively, in the proceedings

María Julia Zurita García (C-261/08),

Aurelio Choque Cabrera (C-348/08)

v

Delegado del Gobierno en la Región de Murcia,

THE COURT (Third Chamber),

composed of P. Lindh, President of the Sixth Chamber, acting as President of the Third Chamber, A. Rosas, U. Lõhmus (Rapporteur), A. Ó Caoimh and A. Arabadjiev, Judges,

Advocate General: J. Kokott,

Registrar: R. Grass,

having regard to the written procedure,

having regard to the request of the national court of 13 June 2008, received at the Court on 19 June 2008, that the urgent procedure be applied to the order for reference in Case C-261/08 *Zurita García* under Article 104b of the Rules of Procedure,

having regard to the decision of the Third Chamber of the Court of 25 June 2008 not to apply the urgent procedure to that order for reference,

after considering the observations submitted on behalf of:

– Mr Choque Cabrera, by E. Bermejo Garrés, procuradora, and A. Corbalán Maiquez, abogado,

– the Spanish Government, by N. Díaz Abad, acting as Agent,

– the Italian Government, by I. Bruni, acting as Agent, and by G. Fiengo and W. Ferrante, avvocati dello Stato,

– the Austrian Government, by E. Riedl, acting as Agent,

– the Commission of the European Communities, by M. Wilderspin and E. Adsera Ribera, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 19 May 2009,

gives the following

Judgment

1 The present references for preliminary rulings concern the interpretation of Article 62(1) and (2)(a) EC, and Articles 5, 11 and 13 of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code) (OJ 2006 L 105, p. 1).

2 The references have been made in the course of two actions brought by Bolivian nationals, namely Ms Zurita García (Case C-261/08) and Mr Choque Cabrera (Case C-348/08), against the Delegado del Gobierno en la Región de Murcia (government representative for the region of Murcia; 'the Delgado del Gobierno') relating to orders for expulsion from Spanish territory, with a prohibition on entry into the Schengen area for five years, adopted against Ms Zurita García and Mr Choque Cabrera.

Legal context

Community legislation

The Schengen Protocol

3 Under Article 1 of the Protocol integrating the Schengen *acquis* into the framework of the European Union, annexed to the Treaty on European Union and the Treaty establishing the European Community by the Treaty of Amsterdam ('the Protocol'), 13 Member States of the European Union are authorised to establish closer cooperation among themselves within the scope of the Schengen *acquis*, as defined in the annex to that protocol. That cooperation is conducted within the institutional and legal framework of the European Union and with respect for the relevant provisions of the Treaty on European Union and of the Treaty establishing the European Community.

4 Under the first subparagraph of Article 2(1) of the Protocol, from the date of entry into force of the Treaty of Amsterdam, that is to say, from 1 May 1999, the Schengen *acquis* was to apply immediately to the 13 Member States referred to in Article 1 of the Protocol.

5 Both the Agreement between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders, signed at Schengen on 14 June 1985 (OJ 2000 L 239, p. 13), and the Convention implementing the Schengen Agreement, signed at Schengen on 19 June 1990 (OJ 2000 L 239, p. 19), as amended by Council Regulation (EC) No 2133/2004 of 13 December 2004 on the requirement for the competent authorities of the Member States to stamp systematically the travel documents of third-country nationals when they cross the external borders of the Member States and amending the provisions of the Convention implementing the Schengen Agreement and the common manual to this

end (OJ 2004 L 369, p. 5) ('the CISA'), form part of that *acquis*.

6 Pursuant to the second sentence of the second subparagraph of Article 2(1) of the Protocol, the Council of the European Union adopted, on 20 May 1999, Decision 1999/436/EC determining, in conformity with the relevant provisions of the Treaty establishing the European Community and the Treaty on European Union, the legal basis for each of the provisions or decisions which constitute the Schengen *acquis* (OJ 1999 L 176, p. 17). It follows from Article 2 of Decision 1999/436, in conjunction with Annex A thereto, that the Council selected Articles 62 EC and 63 EC, which form part of Title IV of the EC Treaty, entitled 'Visas, asylum, immigration and other policies related to free movement of persons', as the legal bases for Article 23 of the CISA.

The CISA

7 Article 6b of the CISA provides:

'1. If the travel document of a third-country national does not bear an entry stamp, the competent national authorities may presume that the holder does not fulfil, or no longer fulfils, the conditions of duration of stay applicable within the Member State concerned.

2. This presumption may be rebutted where the third-country national provides, by any means, credible evidence such as transport tickets or proof of his or her presence outside the territory of the Member States, which shows that he or she has respected the conditions relating to the duration of a short stay.

...

3. Should the presumption referred to in paragraph 1 not be rebutted, the third-country national may be expelled by the competent authorities from the territory of the Member States concerned.'

8 Article 23 of the CISA states:

'1. Aliens who do not fulfil or who no longer fulfil the short-stay conditions applicable within the territory of a Contracting Party shall normally be required to leave the territories of the Contracting Parties immediately.

...

3. Where such aliens have not left voluntarily or where it may be assumed that they will not do so or where their immediate departure is required for reasons of national security or public policy, they must be expelled from the territory of the Contracting Party in which they were apprehended, in accordance with the national law of that Contracting Party. If under that law expulsion is not authorised, the Contracting Party concerned may allow the persons concerned to remain within its territory.

...

5. Paragraph 4 shall not preclude the application of national provisions on the right of asylum, the Geneva Convention relating to the Status of Refugees of 28 July 1951, as amended by the New York Protocol of 31 January 1967, paragraph 2 of this Article or Article 33(1) of this Convention.'

Regulation No 562/2006

9 Regulation No 562/2006 codifies the existing texts on border controls and seeks to consolidate and

develop the legislative aspect of the policy of integrated management of borders by detailing rules on the crossing of external borders.

10 Under Article 5 of that regulation, relating to entry conditions for third-country nationals:

‘1. For stays not exceeding three months per six-month period, the entry conditions for third-country nationals shall be the following:

(a) they are in possession of a valid travel document or documents authorising them to cross the border;

(b) they are in possession of a valid visa, if required pursuant to Council Regulation (EC) No 539/2001 of 15 March 2001 listing the third countries whose nationals must be in possession of visas when crossing the external borders and those whose nationals are exempt from that requirement [OJ 2001 L 81, p. 1], except where they hold a valid residence permit;

(c) they justify the purpose and conditions of the intended stay, and they have sufficient means of subsistence, both for the duration of the intended stay and for the return to their country of origin or transit to a third country into which they are certain to be admitted, or are in a position to acquire such means lawfully;

(d) they are not persons for whom an alert has been issued in the [Schengen Information System] for the purposes of refusing entry;

(e) they are not considered to be a threat to public policy, internal security, public health or the international relations of any of the Member States, in particular where no alert has been issued in Member States’ national databases for the purposes of refusing entry on the same grounds.

…’

11 The wording of Article 11(1) and (3) of Regulation No 562/2006, concerning the presumption as regards fulfilment of conditions of duration of stay, adopted that of Article 6b(1) and (3) of the CISA, except in the Spanish-language version, which provides as follows in Article 11(3) of the regulation:

‘Should the presumption referred to in paragraph 1 not be rebutted, the competent authorities shall expel the third-country national from the territories of the Member States concerned.’

12 Article 13 of Regulation No 562/2006, concerning the refusal of entry, states:

‘1. A third-country national who does not fulfil all the entry conditions laid down in Article 5(1) and does not belong to the categories of persons referred to in Article 5(4) shall be refused entry to the territories of the Member States. This shall be without prejudice to the application of special provisions concerning the right of asylum and to international protection or the issue of long-stay visas.

…’

13 Under Article 39(1) of that regulation, Articles 2 to 8 of the CISA were repealed with effect from 13 October 2006.

14 Pursuant to its Article 40, Regulation No 562/2006 entered into force on 13 October 2006.

National legislation

15 Framework Law 4/2000 on the rights and freedoms of aliens in Spain and their social integration (Ley Orgánica sobre derechos y libertades de los extranjeros en España y su integración social) of 11 January 2000 (BOE No 10 of 12 January 2000, p. 1139) was amended by Framework Law 8/2000 of 22 December 2000 (BOE No 307 of 23 December 2000, p. 45508), and by Framework Law 14/2003 of 20 November 2003 (BOE No 279 of 21 November 2003, p. 41193) ('the Law on Aliens').

16 Article 28(3) of the Law on Aliens, which governs the departure of aliens from Spain, provides:

'Departure [from Spanish territory] is obligatory in the following situations:

...

(c) in the event of administrative refusal of applications to remain on Spanish territory submitted by an alien, or in the absence of authorisation to be in Spain.'

17 Pursuant to Article 51 of the Law on Aliens, offences under the provisions relating to the entry and stay of aliens are classified according to their gravity as 'less serious', 'serious' and 'very serious'.

18 Article 53(a) of that law defines a serious offence as:

'Being unlawfully present on Spanish territory, on the ground that the person concerned has not obtained an extension of permission to stay or a residence permit, or on the ground that these have expired more than three months previously, and that person has not applied for renewal of that permission to stay or residence permit within the period laid down by law.'

19 Under Article 55 of the Law on Aliens, the penalty for a serious offence is a maximum fine of EUR 6 000. When imposing the penalty, the competent authority must apply criteria of proportionality, taking into account the degree of culpability, the damage caused, and the risk arising from the offence and its repercussions.

20 Article 57 of the Law on Aliens, concerning expulsion from the territory, provides:

'1. If the offender is a foreign national and behaves in a manner defined by law as very serious, or serious, within the meaning of Article 53(a), (b), (c), (d) and (f) of this Framework Law, it is possible, instead of imposing a fine, to expel that person from Spanish territory, at the conclusion of the corresponding administrative procedure.

2. Where the alien has been found guilty, in Spain or abroad, of intentional conduct which constitutes a criminal offence in Spain punishable by a prison sentence of longer than one year, that shall constitute a further legal basis for expulsion at the end of the corresponding administrative procedure, save where the previous conviction has been removed from the criminal record.

3. Under no circumstances may the penalties of expulsion and a fine be imposed together.

...'

21 Article 158 of Royal Decree 2393/2004, which adopted rules for the implementation of the Law on Aliens (Reglamento de la Ley de Extranjería) of 30 December 2004 (BOE No 6 of 7 January 2005, p. 485), provides:

'1. In the absence of authorisation to be in Spain, inter alia, because the conditions for entry or

residence are not met, or are no longer met, or in the event of an administrative refusal of an application for permission to stay, a residence permit or any other documentation necessary so that the alien may remain on Spanish territory … the administrative decision shall inform the person concerned of the obligation on him to leave the country, without prejudice to the possibility of that warning also being indicated on his passport or similar document, or even being indicated on a separate document if the person concerned is present in Spain on the basis of an identification document which does not allow for a suitable statement to be inserted.

...

2. The compulsory departure must take place within the period prescribed by the decision refusing the request or, if appropriate and at the latest, within 15 days of the notification of the decision of refusal, save for exceptional circumstances and where the person concerned is able to prove that he has sufficient means of subsistence; in such a situation, the period may be extended by 90 days at most. If the period expires and the departure has not taken place, the provisions laid down in the present rules for the cases referred to in Article 53(a) of the Law [on Aliens] shall be applied.

3. If the aliens to whom the present article refers in fact leave Spanish territory in accordance with the provisions of the foregoing paragraphs, they shall not be prohibited from entering the country and they may return to Spain, on condition that they comply with the rules governing access to Spanish territory.

...'

22 It is apparent from the orders for reference that the abovementioned national provisions are interpreted by the Tribunal Supremo (Supreme Court) as meaning that, since expulsion is a criminal penalty, the decision which imposes it must be specifically reasoned and must comply with the principle of proportionality.

23 It is apparent from the files before the Court that, in practice, where a third-country national does not have the right to enter or remain in Spain and his conduct has not given rise to aggravating circumstances, the penalty imposed is to be restricted to a fine, except where there is an additional factor which would justify replacing the fine with expulsion.

The disputes in the main proceedings and the question referred for preliminary ruling

24 In Case C-261/08, on 26 September 2006, the competent authorities initiated an administrative procedure for infringement of Article 53(a) of the Law on Aliens against Ms Zurita García, a Bolivian national who was unlawfully present in Spain, either on the ground that she had not obtained an extension of her permission to stay or residence permit, or on the ground that the validity of those documents had expired more than three months previously and she had not sought to have them renewed.

25 That procedure led, on 15 November 2006, to the adoption of a decision by the Delgado del Gobierno announcing that Ms Zurita García was to be expelled from Spanish territory. That penalty was accompanied by a prohibition on entry to the Schengen area for a period of five years.

26 Ms Zurita García challenged that decision before the Juzgado de lo Contencioso-Administrativo nº 6 de Murcia (Court for Contentious Administrative Proceedings No 6 of Murcia), which rejected the action at first instance. On appeal, Ms Zurita García claimed that that decision should be quashed

because the administration had not correctly applied the principle of proportionality when assessing the circumstances of the case, which in no way justified the replacement of a fine by expulsion.

27 In Case C-348/08, by decision of 30 July 2007, the Delgado del Gobierno ordered the expulsion from Spanish territory of Mr Choque Cabrera, a Bolivian national who was unlawfully in Spain, within the meaning of Article 53(a) of the Law on Aliens, either on the ground that he had not obtained an extension of his permission to stay or residence permit, or on the ground that the validity of those documents had expired more than three months previously and he had not sought to have them renewed. That penalty was accompanied with a prohibition on entry to the Schengen area for a period of five years.

28 Mr Choque Cabrera challenged that decision before the Juzgado de lo Contencioso-Administrativo nº 4 de Murcia (Court for Contentious Administrative Proceedings No 4 of Murcia), which rejected the action at first instance. On appeal, Mr Choque Cabrera claimed that that decision should be quashed because the administration had not applied the principle of proportionality when assessing the circumstances of the case, and did not give reasons for replacing a fine with expulsion.

29 In those circumstances, the Tribunal Superior de Justicia de Murcia (High Court of Justice of Murcia) decided to stay both actions before it and to refer the following question, worded identically in each case, to the Court for a preliminary ruling:

‘Should Article 62(1) and (2)(a) of the Treaty establishing the European Community and Articles 5, 11 and 13 of Regulation (EC) No 562/2006 … be interpreted as precluding national legislation, and the case-law which interprets it, which permits the substitution of the expulsion of any “third-country national” who does not have documentation authorising him to enter and remain in the territory of the European Union by imposition of a fine?’

30 By order of the President of the Third Chamber of 27 March 2009, Cases C-261/08 and C-348/08 were joined for the purposes of the oral procedure and of judgment.

The question referred for a preliminary ruling

Admissibility of the question referred in Case C-261/08

31 The Spanish Government submits that the question referred in Case C-261/08 is inadmissible on the ground that it is purely hypothetical.

32 It claims that the principle of non-retroactivity in criminal law precludes the application *ratione temporis* of the obligation, which may be laid down in Article 11(3) of Regulation No 562/2006, to penalise the facts of the case in the main proceedings by expulsion, inasmuch as that regulation entered into force only on 13 October 2006, whereas the appellant in the main proceedings had already been accused of being unlawfully present on Spanish territory on 26 September 2006.

33 In the Spanish Government’s view, as the case in the main proceedings concerns an administrative penalty, to which the same principles apply as those which apply to criminal proceedings, in particular the principle of legality and that of incrimination, the applicable legislation should be that which was in force on the date of the facts alleged, and not that which was applicable on the date on which the expulsion decision was taken by the national authorities, namely 15 November 2006, a position which the referring court appears to share.

34 In that regard, it should be recalled that, in proceedings under Article 234 EC, which are based on a clear separation of functions between the national courts and the Court of Justice, any assessment of the facts in the case is a matter for the national court. Similarly, it is solely for the national court, before which the dispute has been brought and which must assume responsibility for the ultimate judicial decision, to determine in the light of the particular circumstances of the case both the need for a preliminary ruling in order to enable it to deliver judgment and the relevance of the questions which it submits to the Court. Consequently, where the questions submitted concern the interpretation of Community law, the Court is in principle bound to give a ruling (see, inter alia, Case C-326/00 *IKA* [2003] ECR I-1703, paragraph 27; Case C-145/03 *Keller* [2005] ECR I-2529, paragraph 33; Case C-419/04 *Conseil général de la Vienne* [2006] ECR I-5645, paragraph 19; and Case C-537/07 *Gómez-Limón* [2009] ECR I-0000, paragraph 24).

35 The Court may refuse to rule on a question referred for a preliminary ruling by a national court only where it is quite obvious that the interpretation of Community law that is sought bears no relation to the actual facts of the main action or its purpose, where the problem is hypothetical, or where the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it (see, inter alia, Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraph 39; Case C-390/99 *Canal Satélite Digital* [2002] ECR I-607, paragraph 19; and *Gómez-Limón*, paragraph 25).

36 However, the Court has also held that, in exceptional circumstances, it can examine the conditions in which the case was referred to it by the national court, in order to assess whether it has jurisdiction (see, to that effect, Case 244/80 *Foglia* [1981] ECR 3045, paragraph 21). The spirit of cooperation which must prevail in the preliminary ruling procedure requires the national court, for its part, to have regard to the function entrusted to the Court of Justice, which is to assist in the administration of justice in the Member States and not to deliver advisory opinions on general or hypothetical questions (*Foglia*, paragraphs 18 and 20; Case 149/82 *Robards* [1983] ECR 171, paragraph 19; and Case C-83/91 *Meilicke* [1992] ECR I-4871, paragraph 25).

37 In the present context, it must be held that, on the date on which the appellant in the main proceedings in Case C-261/08 was officially accused of being unlawfully present on Spanish territory, namely 26 September 2006, Regulation No 562/2006 had not yet entered into force, with the result that the issue as to whether that regulation needs to be interpreted may arise in relation to the facts giving rise to that case.

38 It is Article 6b of the CISA, and not Article 11(3) of Regulation No 562/2006, which will be applicable if the date of the facts were to be the criterion for determining the law applicable *ratione temporis* in Case C-261/08. Article 6b of the CISA is among those provisions which were repealed under Article 39 of Regulation No 562/2006 with effect from 13 October 2006.

39 In any event, however, as the Advocate General notes in point 27 of her Opinion, Article 11(3) of Regulation No 562/2006 merely repeats the wording of Article 6b(3) of the CISA, which was in force when the appellant in the main proceedings was officially accused of being unlawfully present on Spanish territory.

40 Moreover, it should be pointed out that the referring court has submitted a question for a preliminary ruling to the Court with the same wording, in the course of the proceedings giving rise to the case which is joined to Case C-261/08, that is to say, Case C-348/08, the facts of which occurred when Regulation No 562/2006 was already in force.

41 Therefore, the question referred in each of the two joined cases must be held to be admissible.

Substance

42 At the outset, it should be pointed out that the request for interpretation concerns Article 62(1) and (2)(a) EC, and Articles 5, 11 and 13 of Regulation No 562/2006.

43 It must be specified, firstly, that Article 62(1) and (2)(a) EC constitutes the legal basis for the Council's action with a view to the adoption of measures ensuring the absence of any checks on persons when crossing internal borders, and measures on the crossing of the external borders of the Member States, and does not have the objective, in and of itself, of granting rights to third-country nationals, or of imposing obligations on Member States.

44 Next, Article 5 of Regulation No 562/2006 establishes the entry conditions for third-country nationals when they cross an external border for stays not exceeding three months per six-month period, while Article 13 of that regulation concerns the refusal of entry, to the territory of the Member States, to third-country nationals who do not fulfil all of those conditions.

45 Consequently, Articles 5 and 13 of Regulation No 562/2006 likewise do not govern the situation of third-country nationals, such as Ms Zurita García and Mr Choque Cabrera, who were already on Spanish territory, since an unspecified date, when the expulsion order was made against them on grounds of their unlawful stay.

46 Lastly, having regard to the fact that it cannot be ruled out that Articles 6b and 23 of the CISA may be applicable, *ratione temporis*, in Case C-261/08 (see paragraphs 37 and 38 of this judgment), as the Austrian Government and the Commission of the European Communities suggest, it is appropriate to take those articles of the CISA into account when examining the question referred for a preliminary ruling in order to provide the referring court with an answer which will be of use to it (see, by analogy, Case C-275/06 *Promusicae* [2008] ECR I-271, paragraph 46, and Case C-346/06 *Rüffert* [2008] ECR I-1989, paragraph 18).

47 As is clear from its wording, Article 23 of the CISA applies to all those who are not nationals of a Member State and who do not fulfil, or no longer fulfil, the short-stay conditions applicable within the territory of one of the Member States, which, according to the factual account given in the orders for reference, would appear to be the situation of both Ms Zurita García and Mr Choque Cabrera.

48 It follows that, by its question, the referring court is asking, in essence, whether Articles 6b and 23 of the CISA and Article 11 of Regulation No 562/2006 must be interpreted as meaning that, where a third-country national is unlawfully present on the territory of a Member State because he or she does not fulfil, or no longer fulfils, the short-stay conditions applicable in that Member State, that Member State is obliged to adopt a decision to expel that person.

49 Both Article 6b(1) of the CISA and Article 11(1) of Regulation No 562/2006 establish a rebuttable presumption under which, if the travel document of a third-country national does not bear an entry stamp, the competent national authorities may presume that the holder does not fulfil, or no longer fulfils, the conditions of duration of stay applicable within the Member State concerned.

50 Article 6b(2) of the CISA, like Article 11(2) of Regulation No 562/2006, allows for that presumption to be rebutted where the third-country national provides, by any means, credible evidence, such as transport tickets or proof of his or her presence outside the territory of the Member States, that he or she has respected the conditions relating to the duration of a short stay.

51 Pursuant to Article 6b(3) of the CISA and Article 11(3) of Regulation No 562/2006, should the presumption referred to in paragraph 1 of both of those articles not be rebutted, the third-country national may be expelled by the competent authorities from the territory of the Member States concerned.

52 The Commission points out, correctly, that there is a discrepancy between the wording of the Spanish-language version of Article 11(3) of Regulation No 562/2006 and that of the other language versions.

53 In the Spanish-language version, that provision imposes an obligation, inasmuch as it provides that the competent authorities of the Member State 'shall expel', from the territory of that Member State, a third-country national if the presumption is not rebutted. By contrast, in all the other language versions, expulsion appears as an option for those authorities.

54 It must be borne in mind in this regard that, according to settled case-law, the necessity for uniform application and accordingly for uniform interpretation of a Community measure makes it impossible to consider one version of the text in isolation, but requires that it be interpreted on the basis of both the real intention of its author and the aim he seeks to achieve, in the light, in particular, of the versions in all languages (see, inter alia, Case 29/69 *Stauder* [1969] ECR 419, paragraph 3; Case 55/87 *Moksel Import und Export* [1988] ECR 3845, paragraph 15; Case C-268/99 *Jany and Others* [2001] ECR I-8615, paragraph 47; and Case C-188/03 *Junk* [2005] ECR I-885, paragraph 33).

55 It also follows from settled case-law that the wording used in one language version of a Community provision cannot serve as the sole basis for the interpretation of that provision, or be made to override the other language versions in that regard. Such an approach would be incompatible with the requirement of the uniform application of Community law (see Case C-149/97 *Institute of the Motor Industry* [1998] ECR I-7053, paragraph 16; Case C-187/07 *Endendijk* [2008] ECR I-2115, paragraph 23; and Case C-239/07 *Sabatauskas and Others* [2008] ECR I-7523, paragraph 38).

56 In the present cases, as the Spanish-language version of Article 11(3) of Regulation No 562/2006 is the only one which diverges from the wording of the other language versions, it must be concluded that the real intention of the legislature was not to impose an obligation on the Member States concerned to expel, from their territory, third-country nationals in the event that they have not succeeded in rebutting the presumption referred to in Article 11(1), but to grant those Member States the option of so doing.

57 That interpretation is confirmed, as the Advocate General states in point 43 of her Opinion, by the fact that the Spanish-language version of Article 6b of the CISA, the wording of which was repeated in Article 11 of Regulation No 562/2006, accords with the other language versions as regards the discretionary nature of the power, for the Member States concerned, to expel a third-country national who does not succeed in rebutting the abovementioned presumption.

58 It remains to be examined whether, as the Austrian Government claims, it follows from Article 23 of the CISA that the Member States must expel from their territory any third-country national who is unlawfully present there, unless there is a reason to grant that person asylum or international protection. That provision would then preclude the option for a Member State to replace an expulsion order with the imposition of a fine.

59 That interpretation of Article 23 of the CISA cannot be upheld.

60 It should be pointed out, in that regard, that the wording of Article 23 of the CISA does not mention an obligation to expel in such strict terms, in the light of the exceptions therein.

61 First, Article 23(1), which forms part of Chapter 4, concerning the conditions governing the movement of aliens, under Title II on the abolition of checks at internal borders and movement of persons, favours the voluntary departure of a third-country national who does not fulfil, or no longer fulfils, the short-stay conditions applicable within the territory of the Member State concerned.

62 The same applies for Article 23(2), according to which a third-country national who holds a valid residence permit or provisional residence permit issued by another Member State is required to go to the territory of that Member State immediately.

63 Second, to the extent to which Article 23(3) of the CISA provides that, in certain circumstances, a third-country national must be expelled from a Member State on the territory of which he was apprehended, that consequence is subordinate to the conditions laid down in the national law of the Member State concerned. In the event that the application of that national law does not permit expulsion, that Member State may allow the person concerned to remain on its territory.

64 It is thus for the national law of each Member State to adopt, particularly with regard to the conditions under which expulsion may take place, the means for applying the basic rules established in Article 23 of the CISA relating to third-country nationals who do not fulfil, or no longer fulfil, the short-stay conditions for its territory.

65 In the cases in the main proceedings, it is apparent from the information provided to the Court in the course of the written procedure that, under national law, a decision imposing a fine is not a permit for a third-country national who is unlawfully present in Spain to remain legally on Spanish territory. It is also apparent that, irrespective of whether that fine is paid or not, that decision is notified to the person concerned with a warning that he should leave the territory within 15 days and, that, should he fail to comply, he may be prosecuted under Article 53(a) of the Law on Aliens and risks being expelled with immediate effect.

66 Consequently, the reply to the question referred is that Articles 6b and 23 of the CISA and Article 11 of Regulation No 562/2006 must be interpreted as meaning that, where a third-country national is unlawfully present on the territory of a Member State because he or she does not fulfil, or no longer fulfils, the conditions of duration of stay applicable there, that Member State is not obliged to adopt a decision to expel that person.

Costs

67 Since these proceedings are, for the parties to the main proceedings, a step in the actions pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Third Chamber) hereby rules:

Articles 6b and 23 of the Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders, signed at Schengen on 19 June 1990, as amended by Council Regulation (EC) No 2133/2004 of 13 December 2004 on the requirement for the competent authorities of the Member States to stamp systematically the travel documents of third-country nationals

when they cross the external borders of the Member States and amending the provisions of the Convention implementing the Schengen Agreement and the common manual to this end, and Article 11 of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code) must be interpreted as meaning that, where a third-country national is unlawfully present on the territory of a Member State because he or she does not fulfil, or no longer fulfils, the conditions of duration of stay applicable there, that Member State is not obliged to adopt a decision to expel that person.

[Signatures]

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* Language of the cases: Spanish.

Case C-445/06

Danske Slagterier

v

Bundesrepublik Deutschland

(Reference for a preliminary ruling from the Bundesgerichtshof)

(Measures having equivalent effect – Animal health – Intra-Community trade – Fresh meat – Veterinary checks – Non-contractual liability of a Member State – Limitation period – Determination of the loss or damage)

Summary of the Judgment

1. *Agriculture – Approximation of laws on animal health – Intra-Community trade in fresh meat – Veterinary checks – Directives 64/433 and 89/662 – Incorrect transposition and application – Obligation on the Member State to make good damage caused to individuals*

   (Art. 28 EC; Council Directive 64/433, as amended by Directive 91/497, and Council Directive 89/662)

2. *Community law – Rights conferred on individuals – Breach by a Member State – Obligation to make good damage caused to individuals*

3. *Community law – Rights conferred on individuals – Breach by a Member State – Obligation to make good damage caused to individuals*

   (Art. 226 EC)

4. *Community law – Rights conferred on individuals – Breach by a Member State of the obligation to transpose a directive – Obligation to make good damage caused to individuals*

5. *Community law – Rights conferred on individuals – Breach by a Member State – Obligation to make good damage caused to individuals*

   (Arts 226 EC and 234 EC)

1. The principle of State liability for loss and damage caused to individuals as a result of breaches of Community law for which the State can be held responsible is inherent in the system of the Treaty. Individuals harmed have a right to reparation where three conditions are met: the rule of Community law infringed must be intended to confer rights on them; the breach of that rule must be sufficiently serious; and there must be a direct causal link between the breach and the loss or damage sustained by the individuals.

   With regard to the first condition, Article 28 EC has direct effect in the sense that it confers on individuals rights upon which they are entitled to rely directly before the national courts and breach of that provision may give rise to reparation.

   The right conferred by Article 28 EC is defined and given concrete expression by Directive 64/433 on health conditions for the production and marketing of fresh meat, as amended by Directive 91/497, and Directive 89/662 concerning veterinary checks in intra-Community trade with a view to the completion of the internal market. The free

movement of goods is one of the objectives of those directives, which, through the elimination of the differences existing between the Member States with regard to health requirements for fresh meat, are designed to encourage intra-Community trade. In particular, the prohibition on the Member States' preventing imports of fresh meat except where the goods do not meet the conditions laid down by Community directives or in certain very specific circumstances such as in the event of epidemics gives individuals the right to market in another Member State fresh meat that complies with the Community requirements.

It follows that individuals who have been harmed by the incorrect transposition and application of Directives 64/433 and 89/662 may rely on the right to the free movement of goods in order to be able to render the State liable for the breach of Community law.

(see paras 19-20, 22-24, 26, operative part 1)

2. In the absence of Community legislation, it is for the internal legal order of each Member State to designate the competent courts and lay down the detailed procedural rules for legal proceedings intended fully to safeguard the rights which individuals derive from Community law. It is thus on the basis of the rules of national law on liability that the State must make reparation for the consequences of loss or damage caused to individuals by the breach of Community law, provided that the conditions, including time-limits, for reparation of loss or damage laid down by national law comply with the principles of equivalence and effectiveness.

As regards the latter principle, it is compatible with Community law to lay down reasonable time-limits for bringing proceedings in the interests of legal certainty. Such time-limits are not liable to make it in practice impossible or excessively difficult to exercise the rights conferred by Community law. In that regard, a national limitation period of three years appears to be reasonable.

However, in order to serve their purpose of ensuring legal certainty, limitation periods must be fixed in advance. A situation marked by significant legal uncertainty may involve a breach of the principle of effectiveness, because reparation of the loss or damage caused to individuals by breaches of Community law for which a Member State can be held responsible could be rendered excessively difficult in practice if the individuals were unable to determine the applicable limitation period with a reasonable degree of certainty. It is for the national court, taking account of all the features of the legal and factual situation at the material time, to determine, in light of the principle of effectiveness, whether the application by analogy of a time-limit laid down by a national rule to claims for reparation of loss or damage caused as a result of the breach of Community law by the Member State concerned was sufficiently foreseeable for individuals.

So far as concerns whether the application by analogy of such a time-limit is compatible with the principle of equivalence, it is likewise for the national court to determine whether, as a result of its application, the conditions for reparation of loss or damage caused to individuals by the breach of Community law by that Member State would have been less favourable than those applicable to the reparation of similar domestic loss or damage.

(see paras 31-35)

3. Where the Commission of the European Communities has brought infringement proceedings under Article 226 EC, Community law does not require the limitation period laid down by national legislation for a claim seeking reparation on account of State liability for breach of Community law to be interrupted or suspended during those proceedings.

The fact that institution of infringement proceedings does not have the effect of interrupting or suspending the limitation period does not make it impossible or excessively difficult for individuals to exercise the rights which they derive from

Community law, given that an individual may bring an action seeking reparation under the detailed rules laid down for that purpose by national law without having to wait until a judgment finding that the Member State has infringed Community law has been delivered.

Furthermore, having regard to the specific features of proceedings under Article 226 EC compared with national procedural rules, national legislation which does not provide that the limitation period is interrupted or suspended when such proceedings have been brought by the Commission observes the principle of equivalence.

(see paras 39, 42, 45-46, operative part 2)

4. Community law does not preclude the limitation period applicable to an action for damages against the State for incorrect transposition of a directive from beginning to run on the date on which the first injurious effects of the incorrect transposition have been produced and the further injurious effects thereof are foreseeable, even if that date is prior to the correct transposition of the directive.

The fact that the limitation period laid down by national law begins to run on that date is not liable to make it in practice impossible or excessively difficult to exercise the rights conferred by Community law.

(see paras 49, 56, operative part 3)

5. Community law does not preclude the application of national legislation which lays down that an individual cannot obtain reparation for loss or damage which he has wilfully or negligently failed to avert by utilising a legal remedy, provided that utilisation of that remedy can reasonably be required of the injured party, a matter which is for the referring court to determine in light of all the circumstances of the main proceedings.

The likelihood that a national court will make a reference for a preliminary ruling under Article 234 EC or the existence of infringement proceedings pending before the Court of Justice cannot, in itself, constitute a sufficient reason for concluding that it is not reasonable to have recourse to a legal remedy.

First, the guidance obtained by a national court following a reference for a preliminary ruling facilitates its application of Community law, so that utilisation of that instrument of cooperation between the Court of Justice and the national courts does not in any way contribute to making it excessively difficult for individuals to exercise the rights which they derive from Community law. Accordingly, it would not be reasonable not to utilise a legal remedy solely because that remedy would be likely to give rise to a reference for a preliminary ruling.

Second, the procedure under Article 226 EC is entirely independent of national procedures and does not replace them. Infringement proceedings amount in fact to an objective review of legality in the general interest. Although the result of such proceedings may serve an individual's interests, it none the less remains reasonable for him to avert the loss or damage by applying all the means available to him, that is to say utilising the available legal remedies.

(see paras 65, 67, 69, operative part 4)

JUDGMENT OF THE COURT (Grand Chamber)

24 March 2009 (*)

(Measures having equivalent effect – Animal health – Intra-Community trade – Fresh meat – Veterinary checks – Non-contractual liability of a Member State – Limitation period – Determination of the loss or damage)

In Case C-445/06,

REFERENCE for a preliminary ruling under Article 234 EC from the Bundesgerichtshof (Germany), made by decision of 12 October 2006, received at the Court on 6 November 2006, in the proceedings

Danske Slagterier

v

Bundesrepublik Deutschland,

THE COURT (Grand Chamber),

composed of V. Skouris, President, P. Jann, C.W.A. Timmermans, A. Rosas, K. Lenaerts, M. Ilešič and A. Ó Caoimh, Presidents of Chambers, G. Arestis, A. Borg Barthet (Rapporteur), J. Malenovský, J. Klučka, U. Lõhmus and E. Levits, Judges,

Advocate General: V. Trstenjak,

Registrar: K. Sztranc-Sławiczek, Administrator,

having regard to the written procedure and further to the hearing on 21 May 2008,

after considering the observations submitted on behalf of:

– Danske Slagterier, by R. Karpenstein, Rechtsanwalt,

– the German Government, by M. Lumma and C. Blaschke, acting as Agents, assisted by L. Giesberts, Rechtsanwalt,

– the Czech Government, by T. Boček, acting as Agent,

– the Greek Government, by V. Kontolaimos, S. Kharitaki and S. Papaioannou, acting as Agents,

– the French Government, by G. de Bergues and A.-L. During, acting as Agents,

– the Italian Government, by I.M. Braguglia, acting as Agent, assisted by W. Ferrante, avvocato dello Stato,

– the Polish Government, by E. Ośniecka-Tamecka and P. Kucharski, acting as Agents,

– the United Kingdom Government, by S. Lee, barrister,

– the Commission of the European Communities, by F. Erlbacher and H. Krämer, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 4 September 2008,

gives the following

Judgment

1 This reference for a preliminary ruling relates to the interpretation of Articles 5(1)(o) and 6(1)(b)(iii) of Council Directive 64/433/EEC of 26 June 1964 on health conditions for the production and marketing of fresh meat (OJ, English Special Edition 1963-64, p. 185), as amended by Council Directive 91/497/EEC of 29 July 1991 (OJ 1991 L 268, p. 69) ('Directive 64/433'), of Articles 5(1), 7 and 8 of Council Directive 89/662/EEC of 11 December 1989 concerning veterinary checks in intra-Community trade with a view to the completion of the internal market (OJ 1989 L 395, p. 13) and of Article 28 EC.

2 The reference was made in proceedings between Danske Slagterier and the Bundesrepublik Deutschland concerning a claim for compensation in respect of loss.

Legal context

Community legislation

3 Article 5(1) of Directive 64/433 provides:

'Member States shall ensure that the official veterinarian declares unfit for human consumption:

...

(o) meat which gives off a pronounced sexual odour.'

4 Article 6(1) of that directive provides:

'Member States shall ensure that:

...

(b) meat from:

...

(iii) without prejudice to the cases provided for in Article 5(1)(o) uncastrated male pigs with a carcase weight in excess of 80 kilograms, except where the establishment is able to guarantee by means of a method recognised by the procedure laid down in Article 16, or in the absence of such a method by a method recognised by the competent authority concerned, that carcases giving off a pronounced boar taint may be detected,

bears the special mark provided for by [Commission] Decision 84/371/EEC [of 3 July 1984 establishing the characteristics of the special mark for fresh meat referred to in Article 5(a) of Directive 64/433/EEC (OJ 1984 L 196, p. 46)] and undergoes one of the treatments provided for in [Council] Directive 77/99/EEC [of 21 December 1976 on health problems affecting intra-Community trade in meat products (OJ 1977, L 26, p. 85)];

...

(g) the treatment provided for in the preceding points is carried out in the establishment of

origin or in any other establishment designated by the official veterinarian;

...'

5 The provisions of Directive 64/433 had to be transposed into national law by 1 January 1993.

6 Article 5(1) of Directive 89/662 provides:

'Member States of destination shall implement the following measures:

(a) The competent authority may, at the places of destination of goods, check by means of non-discriminatory veterinary spot-checks that the requirements of Article 3 have been complied with; it may take samples at the same time.

Furthermore, where the competent authority of the Member State of transit or of the Member State of destination has information leading it to suspect an infringement, checks may also be carried out during the transport of goods in its territory, including checks on compliance as regards the means of transport;

...'

7 Article 7(1) of Directive 89/662 states:

'If, during a check carried out at the place of destination of a consignment or during transport, the competent authorities of a Member State establish:

...

(b) that the goods do not meet the conditions laid down by Community directives, or, in the absence of decisions on the Community standards provided for by the directives, by national standards, they may, provided that health and animal-health considerations so permit, give the consignor or his representative the choice of:

– destroying the goods, or

– using the goods for other purposes, including returning them with the authorisation of the competent authority of the country of the establishment of origin.

...'

8 Finally, Article 8 of Directive 89/662 provides:

'1. In the cases provided for in Article 7, the competent authority of the Member State of destination shall contact the competent authorities of the Member State of dispatch without delay. The latter authorities shall take all necessary measures and notify the competent authority of the first Member State of the nature of the checks carried out, the decisions taken and the reasons for such decisions.

...

2. …

Decisions taken by the competent authority of the State of destination and the reasons for such decisions shall be notified to the consignor or his representative and to the competent authority of the Member State of dispatch.

If the consignor or his representative so requests, the said decisions and reasons shall be forwarded to him in writing with details of the rights of appeal which are available to him under

the law in force in the Member State of destination and of the procedure and time-limits applicable.

...'

National legislation

9 Paragraph 839 of the German Civil Code (Bürgerliches Gesetzbuch), in the version in force until 31 December 2001 ('the BGB'), stated:

'(1) If an official wilfully or negligently breaches the official duty incumbent upon him as against a third party, he shall compensate the third party for the damage arising therefrom. If the official is only negligent, a claim can be made against him only if the injured party is unable to obtain compensation in another way.

(2) If an official commits a breach of official duty in giving judgment in legal proceedings, he shall be liable for the damage arising therefrom only if that breach of duty constitutes a criminal offence. This provision shall not apply to a wrongful refusal to exercise official duties or to a wrongful delay in exercising them.

(3) The obligation to compensate shall not arise if the injured party has wilfully or negligently failed to avert the damage by utilising a legal remedy.'

10 Paragraph 852 of the BGB provided:

'(1) The limitation period in respect of a claim for compensation for damage that has arisen from an unlawful act shall expire three years from the date on which the injured party became aware of the damage and of the identity of the person liable to pay compensation and, irrespective of any such awareness, 30 years from the date on which the unlawful act was committed.

(2) If negotiations on the amount of compensation payable have commenced between the person liable to pay the compensation and the person entitled to it, the limitation period shall be suspended until one or other of the parties refuses to continue the negotiations.

(3) If through his unlawful act the person liable to pay compensation has acquired anything to the injured party's detriment, he shall be required even after the expiry of the limitation period to make restitution in accordance with the provisions on restitution in the case of unjust enrichment.'

The dispute in the main proceedings and the questions referred for a preliminary ruling

11 Danske Slagterier, an industry association of Danish slaughterhouse companies organised in the form of cooperatives and pig farmers, which is acting pursuant to a right assigned to it by its members, claims from the Bundesrepublik Deutschland compensation for loss due to an infringement of Community law. It alleges that, in breach of Community law, the Bundesrepublik Deutschland imposed an import ban on meat from uncastrated male pigs from 1993 to 1999. In its view, the ban led to a loss of at least DEM 280 000 000 for the pig farmers and slaughterhouse companies over the period concerned.

12 At the beginning of the 1990s, a project called the 'Male-Pig-Projekt', whose objective was the farming of uncastrated male pigs, was launched in Denmark. This type of farming, which is financially attractive, entails the risk of the meat, when heated, giving off a pronounced sexual odour. According to Danish researchers, the presence of this taint can already be determined in the course of slaughter, by measuring the skatol content. Accordingly, in Denmark all slaughter lines were fitted with skatol measuring equipment to enable meat affected by the taint in

question to be identified and rejected. At the time, the Federal Republic of Germany considered, however, this taint to be attributable to the hormone androstenone, the formation of which can be avoided by castration at an earlier stage, and that the skatol content considered in isolation cannot in itself constitute a reliable method of detecting the sexual odour.

13 In January 1993, the Federal Republic of Germany informed the highest veterinary authorities of the Member States that the rule laid down in Article 6(1)(b) of Directive 64/433 had been transposed into national law in such a way that, irrespective of the weight limit, a threshold of 0.5 µg/g was fixed for androstenone; if that threshold were exceeded, the meat would give off a pronounced boar taint and would thus be unfit for human consumption. The Federal Republic of Germany also stated then that only Professor Claus's modified enzyme immunoassay was recognised as a specific method for identifying androstenone and that meat from uncastrated male pigs exceeding that threshold could not be transported as fresh meat into Germany.

14 Thus, numerous consignments of pigmeat from Denmark were subsequently checked by the German authorities and rejected because they exceeded the threshold for androstenone. Also, the pig farmers and slaughterhouse companies which had almost ceased production of castrated male pigs had to resume such production in order not to put exports to Germany at risk. Danske Slagterier submits that if the pigmeat exported had come from uncastrated pigs as envisaged by the Male-Pig-Projekt, costs savings of at least DEM 280 000 000 could have been achieved.

15 On 6 December 1999, Danske Slagterier brought an action for damages against the Bundesrepublik Deutschland before the Landgericht (Regional Court) Bonn. The Landgericht held that the action was well founded in respect of the period commencing on 7 December 1996 and dismissed the action as time-barred in so far as it claimed compensation for losses which had arisen before that date. The Oberlandesgericht (Higher Regional Court) Cologne, before which an appeal was brought, upheld the entire claim on the merits. By its appeal on a point of law to the Bundesgerichtshof (Federal Court of Justice), the Bundesrepublik Deutschland seeks the dismissal of the claim in its entirety.

16 Also, by judgment of 12 November 1998 in Case C-102/96 *Commission* v *Germany* [1998] ECR I-6871, the Court held that the Federal Republic of Germany had failed to fulfil its obligations under Articles 5(1)(o) and 6(1)(b) of Directive 64/433 and under Articles 5(1), 7 and 8 of Directive 89/662 by imposing the obligation of marking the carcases of uncastrated male pigs and subjecting them to heat treatment whenever the meat, regardless of carcase weight, had an androstenone content of more than 0.5 µg/g, as shown by Professor Claus's modified enzyme immunoassay, and by regarding the meat as giving off a pronounced sexual odour and consequently unfit for human consumption if the threshold of 0.5 µg/g of androstenone was exceeded.

17 In that context, the Bundesgerichtshof decided to stay the proceedings and to refer the following questions to the Court of Justice for a preliminary ruling:

'(1) Do Article 5(1)(o) and Article 6(1)(b)(iii) of … Directive 64/433 … in conjunction with Article 5(1), Article 7 and Article 8 of Directive 89/662 … place producers and distributors of pigmeat in a legal position which can give rise to a claim seeking to establish State liability under Community law in the event of errors of transposition or application?

(2) May the producers and distributors of pigmeat – irrespective of the answer to the first question – rely on an infringement of Article 30 of the EC Treaty (Article 28 EC) in order to substantiate a claim seeking to establish State liability under Community law where the transposition and application of the abovementioned directives are contrary to Community law?

(3) Does Community law require the limitation period for a claim seeking to establish State liability under Community law to be interrupted in the light of Treaty infringement proceedings under Article 226 EC or at any rate to be suspended pending the end of

those proceedings where there is no effective domestic legal remedy to compel the Member State to transpose a directive?

(4) Does the limitation period for a claim which seeks to establish State liability under Community law and is based on the inadequate transposition of a directive and an accompanying (de facto) import ban commence, irrespective of the applicable national law, only with the full transposition of the directive, or can the limitation period begin to run, in accordance with national law, when the first injurious effects have already been produced and further injurious effects are foreseeable? If full transposition has a bearing on the commencement of the limitation period, is this true in general or only if the directive confers a right on individuals?

(5) Given that the Member States may not frame the conditions for reparation of loss and damage in respect of claims seeking to establish State liability under Community law less favourably than those relating to similar domestic actions and it may not be made in practice impossible or excessively difficult to obtain reparation, are there, generally, objections to a national rule under which an obligation to pay compensation does not arise if the injured party has wilfully or negligently failed to avert the damage by utilising a legal remedy? Are there also objections to this "primacy of primary legal protection" where it is subject to the proviso that it must be reasonable for the party concerned? Is the fact that the relevant court is likely to be unable to answer the questions of Community law at issue without making a reference to the Court of Justice … or that Treaty infringement proceedings under Article 226 EC are already pending sufficient to make it unreasonable under European Community law?'

Consideration of the questions

Questions 1 and 2

18 By the first two questions, which it is appropriate to deal with together, the referring court essentially asks whether Articles 5(1)(o) and 6(1)(b)(iii) of Directive 64/433 in conjunction with Articles 5(1), 7 and 8 of Directive 89/662 place producers and distributors of pigmeat, in the event of incorrect transposition or application of those directives, in a legal position which can give rise to a claim seeking reparation on account of State liability for the breach of Community law and whether, in those circumstances, they can rely on a breach of Article 28 EC in order to substantiate a claim seeking reparation on account of such State liability.

19 It is to be recalled first of all that, in accordance with settled case-law, the principle of State liability for loss and damage caused to individuals as a result of breaches of Community law for which the State can be held responsible is inherent in the system of the EC Treaty (Joined Cases C-6/90 and C-9/90 *Francovich and Others* [1991] ECR I-5357, paragraph 35; Joined Cases C-46/93 and C-48/93 *Brasserie du Pêcheur and Factortame* [1996] ECR I-1029, paragraph 31; Case C-5/94 *Hedley Lomas* [1996] ECR I-2553, paragraph 24; and Joined Cases C-178/94, C-179/94 and C-188/94 to C-190/94 *Dillenkofer and Others* [1996] ECR I-4845, paragraph 20).

20 The Court has held that individuals harmed have a right to reparation where three conditions are met: the rule of Community law infringed must be intended to confer rights on them; the breach of that rule must be sufficiently serious; and there must be a direct causal link between the breach and the loss or damage sustained by the individuals (see *Brasserie du pêcheur and Factortame*, paragraph 51; *Hedley Lomas*, paragraph 25; and *Dillenkofer and Others*, paragraph 21).

21 With regard to the first condition, the Court has had the opportunity to examine Member State liability for breach of Community law in the case of failure to transpose directives designed to complete the internal market (see, in particular, *Francovich and Others* and *Dillenkofer and Others*). However, unlike the cases giving rise to those two judgments, where only secondary

law had created a legal framework according rights to individuals, the main proceedings concern an instance in which one of the parties thereto, namely Danske Slagterier, submits that Article 28 EC already confers upon it the rights which it invokes.

22 It should be recalled that it is undisputed that Article 28 EC has direct effect in the sense that it confers on individuals rights upon which they are entitled to rely directly before the national courts and that breach of that provision may give rise to reparation (*Brasserie du pêcheur and Factortame*, paragraph 23).

23 Danske Slagterier also relies on the provisions of Directives 64/433 and 89/662. As is apparent from the wording of the title of Directive 89/662 and of the first recital in its preamble, that directive was adopted with a view to the completion of the internal market, and so was Directive 91/497 amending Directive 64/433, as made clear by the third recital in the preamble to Directive 91/497. The free movement of goods is thus one of the objectives of those directives, which, through the elimination of the differences existing between the Member States with regard to health requirements for fresh meat, are designed to encourage intra-Community trade. The right conferred by Article 28 EC is thus defined and given concrete expression by those directives.

24 Regarding the content of Directives 64/433 and 89/662, it should be noted that they govern, amongst other matters, health controls for, and certification of, fresh meat produced in one Member State and delivered to another. As is apparent in particular from Article 7(1)(b) of Directive 89/662, the Member States can prevent imports of fresh meat only where the goods do not meet the conditions laid down by Community directives or in certain very specific circumstances such as in the event of epidemics. The prohibition on the Member States' preventing importation gives individuals the right to market in another Member State fresh meat that complies with the Community requirements.

25 It is, moreover, apparent from Directive 64/433 in conjunction with Directive 89/662 that measures for the detection of a pronounced sexual odour from uncastrated male pigs have been harmonised at Community level (Case C-102/96 *Commission* v *Germany*, paragraph 29). This harmonisation consequently prevents the Member States, in the field harmonised exhaustively, from justifying an obstacle to the free movement of goods on grounds other than those envisaged by Directives 64/433 and 89/662.

26 Accordingly, the answer to the first two questions is that individuals who have been harmed by the incorrect transposition and application of Directives 64/433 and 89/662 may rely on the right to the free movement of goods in order to be able to render the State liable for the breach of Community law.

Question 3

27 By its third question, the referring court essentially asks whether, where the Commission of the European Communities has brought infringement proceedings under Article 226 EC, Community law requires the limitation period laid down by national legislation for a claim seeking reparation on account of State liability for breach of Community law to be interrupted or suspended during those proceedings, if there is no effective legal remedy in the State in question to compel it to transpose a directive.

28 Light can be shed on this question by setting out the chronology of the facts in the main proceedings. It is apparent from the order for reference that the infringement proceedings against the Federal Republic of Germany which gave rise to the judgment in Case C-102/96 *Commission* v *Germany* were brought on 27 March 1996. The first harmful effects were sustained by the injured parties in 1993, but it was not until December 1999 that they brought an action for damages against that State. If, as the referring court envisages, the three-year limitation period laid down in Paragraph 852(1) of the BGB is applied, that period would begin to run in the middle of 1996, when, according to the referring court, the injured parties became aware of the damage and the identity of the person liable to pay compensation. Consequently, in

the main proceedings, the action against the State for damages is liable to be time-barred. For that reason, it is relevant for deciding the main proceedings to know whether the institution of infringement proceedings by the Commission had effects on that limitation period.

29 However, in order to give an answer that is helpful for the referring court, it is appropriate to examine first of all the question implicitly raised by it, namely whether Community law precludes the application by analogy of the three-year limitation period laid down by Paragraph 852(1) of the BGB in the main proceedings.

30 Regarding the application of Paragraph 852(1) of the BGB, Danske Slagterier has bemoaned the lack of clarity in the legal position in Germany as to the national limitation rule applicable to claims seeking reparation on account of State liability for breach of Community law, stating that this question has not yet been dealt with by any legislative measure or any decision of the highest court, while academic legal writers are also divided on the issue as several legal bases are possible. In its view, application, for the first time and by analogy, of the time-limit laid down in Paragraph 852 of the BGB to actions for damages against a State for breach of Community law would infringe the principles of legal certainty and legal clarity as well as the principles of effectiveness and equivalence.

31 In that regard, it is settled case-law that, in the absence of Community legislation, it is for the internal legal order of each Member State to designate the competent courts and lay down the detailed procedural rules for legal proceedings intended fully to safeguard the rights which individuals derive from Community law. It is thus on the basis of the rules of national law on liability that the State must make reparation for the consequences of the loss or damage caused, provided that the conditions, including time-limits, for reparation of loss or damage laid down by national law are not less favourable than those relating to similar domestic claims (principle of equivalence) and are not so framed as to make it in practice impossible or excessively difficult to obtain reparation (principle of effectiveness) (see, inter alia, *Francovich and Others*, paragraphs 42 and 43, and Case C-261/95 *Palmisani* [1997] ECR I-4025, paragraph 27).

32 As regards the latter principle, the Court has stated that it is compatible with Community law to lay down reasonable time-limits for bringing proceedings in the interests of legal certainty which protects both the taxpayer and the authorities concerned (Case C-228/96 *Aprile* [1998] ECR I-7141, paragraph 19 and the case-law cited). Such time-limits are not liable to make it in practice impossible or excessively difficult to exercise the rights conferred by Community law. In that regard, a national limitation period of three years appears to be reasonable (see, in particular, *Aprile*, paragraph 19, and Case C-62/00 *Marks & Spencer* [2002] ECR I-6325, paragraph 35).

33 However, it is also apparent from *Marks & Spencer*, paragraph 39, that in order to serve their purpose of ensuring legal certainty, limitation periods must be fixed in advance. A situation marked by significant legal uncertainty may involve a breach of the principle of effectiveness, because reparation of the loss or damage caused to individuals by breaches of Community law for which a Member State can be held responsible could be rendered excessively difficult in practice if the individuals were unable to determine the applicable limitation period with a reasonable degree of certainty.

34 It is for the national court, taking account of all the features of the legal and factual situation at the time material to the main proceedings, to determine, in light of the principle of effectiveness, whether the application by analogy of the time-limit laid down in Paragraph 852(1) of the BGB to claims for reparation of loss or damage caused as a result of the breach of Community law by the Member State concerned was sufficiently foreseeable for individuals.

35 In addition, so far as concerns whether the application by analogy of that time-limit is compatible with the principle of equivalence, it is likewise for the national court to determine whether, as a result of its application, the conditions for reparation of loss or damage caused to individuals by the breach of Community law by that Member State would have been less favourable than those applicable to the reparation of similar domestic loss or damage.

36 As regards interruption or suspension of the limitation period when infringement proceedings are brought, it follows from the foregoing considerations that it is for the Member States to determine detailed procedural matters of this type in so far as the principles of equivalence and effectiveness are observed.

37 It should be observed that reparation of loss or damage cannot be made conditional upon the requirement that there must have been a prior finding by the Court of an infringement of Community law attributable to the State (see *Brasserie du pêcheur and Factortame*, paragraphs 94 to 96, and *Dillenkofer and Others*, paragraph 28).

38 The finding of an infringement is admittedly an important factor, but is not indispensable when verifying that the condition that the breach of Community law must be sufficiently serious is met. Nor can rights for individuals depend on the Commission's assessment of the expediency of taking action against a Member State pursuant to Article 226 EC or on the delivery by the Court of any judgment finding an infringement (see *Brasserie du pêcheur and Factortame*, paragraphs 93 and 95).

39 An individual may therefore bring an action seeking reparation under the detailed rules laid down for that purpose by national law without having to wait until a judgment finding that the Member State has infringed Community law has been delivered. Consequently, the fact that institution of infringement proceedings does not have the effect of interrupting or suspending the limitation period does not make it impossible or excessively difficult for individuals to exercise the rights which they derive from Community law.

40 In addition, Danske Slagterier pleads a breach of the principle of equivalence since German law provides for interruption of the limitation period when a domestic action under Paragraph 839 of the BGB is brought in parallel and proceedings under Article 226 EC must be treated in the same way as such an action.

41 As to those submissions, in order to decide whether procedural rules are equivalent, it is necessary to verify objectively, in the abstract, whether the rules at issue are similar taking into account the role played by them in the procedure as a whole, as well as the operation of that procedure and any special features of the rules (see, to this effect, Case C-78/98 *Preston and Others* [2000] ECR I-3201, paragraph 63).

42 When assessing whether the rules at issue here are similar, account must be taken of the specific features of proceedings under Article 226 EC.

43 In exercising its powers under Article 226 EC the Commission does not have to show that there is a specific interest in bringing an action (see Case 167/73 *Commission* v *France* [1974] ECR 359, paragraph 15, and Joined Cases C-20/01 and C-28/01 *Commission* v *Germany* [2003] ECR I-3609, paragraph 29). The Commission's function is to ensure, of its own motion and in the general interest, that the Member States give effect to Community law and to obtain a declaration of any failure to fulfil the obligations deriving therefrom with a view to bringing it to an end (see *Commission* v *France*, paragraph 15, and Joined Cases C-20/01 and C-28/01 *Commission* v *Germany*, paragraph 29).

44 Article 226 EC is not therefore intended to protect the Commission's own rights. It is for the Commission alone to decide whether or not it is appropriate to bring proceedings against a Member State for a declaration that it has failed to fulfil its obligations and, as the case may be, because of what conduct or omission those proceedings should be brought (Case C-394/02 *Commission* v *Greece* [2005] ECR I-4713, paragraph 16 and the case-law cited). The Commission consequently has a discretion in this regard which excludes the right for individuals to require it to adopt a specific position (see Case 247/87 *Star Fruit* v *Commission* [1989] ECR 291, paragraph 11).

45 It must accordingly be concluded that the principle of equivalence is observed by national legislation which does not provide that the limitation period for a claim seeking reparation on

account of State liability for breach of Community law is interrupted or suspended when proceedings under Article 226 EC have been brought by the Commission.

46 In view of all the foregoing considerations, the answer to the third question is that, where the Commission has brought infringement proceedings under Article 226 EC, Community law does not require the limitation period laid down by national legislation for a claim seeking reparation on account of State liability for breach of Community law to be interrupted or suspended during those proceedings.

Question 4

47 By its fourth question, the referring court essentially asks whether the limitation period applicable to an action for damages against the State for incorrect transposition of a directive begins to run, irrespective of the applicable national law, only when the directive has been fully transposed, or whether that period begins to run, in accordance with national law, on the date on which the first injurious effects of the incorrect transposition have been produced and further injurious effects thereof are foreseeable. If full transposition has a bearing on the course of the limitation period, the referring court asks whether that is true generally or whether it applies only where the directive confers a right on individuals.

48 It should be recalled that, as is apparent from paragraphs 31 and 32 of the present judgment, in the absence of Community legislation, it is for the Member States to lay down the detailed procedural rules for legal proceedings intended to safeguard the rights which individuals derive from Community law, including the provisions governing limitation, in so far as those rules observe the principles of equivalence and effectiveness. It should further be recalled that the setting of reasonable time-limits for bringing proceedings observes those principles and cannot, in particular, be considered to make it in practice impossible or excessively difficult to exercise the rights conferred by Community law.

49 The fact that the limitation period laid down by national law begins to run when the first injurious effects have been produced, although other effects of that kind are foreseeable, is likewise not liable to make it in practice impossible or excessively difficult to exercise the rights conferred by Community law.

50 The judgment in Joined Cases C-295/04 to C-298/04 *Manfredi and Others* [2006] ECR I-6619, to which Danske Slagterier refers, cannot cast doubt on that conclusion.

51 In paragraphs 78 and 79 of that judgment, the Court held that it is conceivable that a short limitation period for bringing an action for damages that runs from the day on which an agreement or concerted practice has been adopted could make it impossible in practice to exercise the right to seek compensation for the harm caused by that prohibited agreement or practice. The Court stated that, where there are continuous or repeated infringements, it is thus possible for the limitation period to expire even before the infringement is brought to an end, in which case it would be impossible for any individual who has suffered harm after the expiry of the limitation period to bring an action.

52 However, that is not the situation in the main proceedings. It is clear from the order for reference that the limitation period at issue in the main proceedings cannot begin to run until the injured party has become aware of the loss or damage and of the identity of the person required to pay compensation. In such circumstances, it is thus impossible for a person who has sustained loss or damage to find himself in a situation in which the limitation period begins to run, or indeed expires, without his even knowing that he has been harmed, as could have been the position in the context of the case which gave rise to the judgment in *Manfredi and Others*, where the limitation period began to run on the adoption of the agreement or concerted practice, of which certain persons concerned may not have been aware until much later.

53 As regards the possibility of setting the point at which a limitation period begins to run as being before the directive in question has been fully transposed, it is true that the Court held in Case

C-208/90 *Emmott* [1991] ECR I-4269, paragraph 23, that, until such time as a directive has been properly transposed, a defaulting Member State may not rely on an individual's delay in initiating proceedings against it in order to protect rights conferred upon him by the provisions of the directive and that a period laid down by national law within which proceedings must be initiated cannot begin to run before that time.

54 However, as was confirmed in Case C-410/92 *Johnson* [11994] ECR I-5483, paragraph 26, it is clear from the judgment in Case C-338/91 *Steenhorst-Neerings* [1993] ECR I-5475 that the solution adopted in *Emmott* was justified by the particular circumstances of that case, in which a time-bar had the result of depriving the applicant in the main proceedings of any opportunity whatsoever to rely on her right to equal treatment under a directive (see also Case C-90/94 *Haahr Petroleum* [1997] ECR I-4085, paragraph 52; Joined Cases C-114/95 and C-115/95 *Texaco and Olieselskabet Danmark* [1997] ECR I-4263, paragraph 48; and Joined Cases C-279/96 to C-281/96 *Ansaldo Energia and Others* [1998] ECR I-5025, paragraph 20).

55 It is not apparent either from the documents before the court or from the hearing which took place in the oral procedure that, in the main proceedings, the existence of the time-limit at issue had the result, as in the proceedings which gave rise to the judgment in *Emmott*, of depriving the injured parties of any opportunity whatsoever to rely on their rights before the national courts.

56 Accordingly, the answer to the fourth question is that Community law does not preclude the limitation period applicable to an action for damages against the State for incorrect transposition of a directive from beginning to run on the date on which the first injurious effects of the incorrect transposition have been produced and the further injurious effects thereof are foreseeable, even if that date is prior to the correct transposition of the directive.

57 In the light of the answer given to the first part of the fourth question, there is no need to answer the second part.

Question 5

58 By its fifth question, the referring court essentially asks whether Community law precludes a rule such as that laid down in Paragraph 839(3) of the BGB which provides that an individual cannot obtain reparation for loss or damage which he has wilfully or negligently failed to avert by utilising a legal remedy. The referring court elaborates upon its question by asking whether such a national rule would be contrary to Community law in so far as it were applied subject to the proviso that recourse to that remedy be reasonable for the person concerned. The referring court would like, finally, to ascertain whether recourse to a legal remedy may be regarded as reasonable when it is likely that the court before which a case is brought will make a reference for a preliminary ruling under Article 234 EC or when infringement proceedings under Article 226 EC have been brought.

59 As has been recalled when answering the previous two questions, it is for the Member States, in the absence of Community legislation, to lay down the detailed procedural rules for legal proceedings intended to safeguard the rights which individuals derive from Community law, in so far as those rules observe the principles of equivalence and effectiveness.

60 As regards utilisation of the available legal remedies, the Court held in *Brasserie du pêcheur and Factortame*, paragraph 84, in relation to liability of a Member State for breach of Community law, that the national court may inquire whether the injured person showed reasonable diligence in order to avoid the loss or damage or limit its extent and whether, in particular, he availed himself in time of all the legal remedies available to him.

61 Indeed, it is a general principle common to the legal systems of the Member States that the injured party must show reasonable diligence in limiting the extent of the loss or damage, or risk having to bear the loss or damage himself (Joined Cases C-104/89 and C-37/90 *Mulder and Others* v *Council and Commission* [1992] ECR I-3061, paragraph 33, and *Brasserie du pêcheur and Factortame*, paragraph 85).

62 It would, however, be contrary to the principle of effectiveness to oblige injured parties to have recourse systematically to all the legal remedies available to them even if that would give rise to excessive difficulties or could not reasonably be required of them.

63 In Joined Cases C-397/98 and C-410/98 *Metallgesellschaft and Others* [2001] ECR I-1727, paragraph 106, the Court indeed held that the exercise of rights conferred on private persons by directly applicable provisions of Community law would be rendered impossible or excessively difficult if their claims for compensation based on Community law were rejected or reduced solely because the persons concerned did not apply for grant of the right which was conferred by Community provisions, and which national law denied them, with a view to challenging the refusal of the Member State by means of the legal remedies provided for that purpose, invoking the primacy and direct effect of Community law. In a case of that kind, it would not have been reasonable to require the injured parties to utilise the legal remedies available to them, since they would in any event have had to make the payment at issue in advance, and even if the national court had held the fact that payment had to be made in advance incompatible with Community law, the persons in question would not have been able to obtain interest on that sum and they would have laid themselves open to the possibility of penalties (see, to this effect, *Metallgesellschaft and Others*, paragraph 104).

64 Consequently, it is to be concluded that Community law does not preclude the application of a national rule such as that laid down in Paragraph 839(3) of the BGB, provided that utilisation of the legal remedy in question can reasonably be required of the injured party. It is for the referring court to determine in light of all the circumstances of the main proceedings whether that is so.

65 As regards the possibility that the legal remedy utilised will give rise to a reference for a preliminary ruling, and the effect which that would have on the reasonableness of that legal remedy, it should be recalled that, in accordance with settled case-law, the procedure provided for by Article 234 EC is an instrument of cooperation between the Court of Justice and the national courts, by means of which the Court provides the national courts with the points of interpretation of Community law which they need in order to decide the disputes before them (see Case C-83/91 *Meilicke* [1992] ECR I-4871, paragraph 22, and Case C-380/01 *Schneider* [2004] ECR I-1389, paragraph 20). The guidance thus obtained by the national court therefore facilitates its application of Community law, so that utilisation of that instrument of cooperation does not in any way contribute to making it excessively difficult for individuals to exercise the rights which they derive from Community law. Accordingly, it would not be reasonable not to utilise a legal remedy solely because that remedy would be likely to give rise to a reference for a preliminary ruling.

66 It follows that a strong likelihood that recourse to a legal remedy will give rise to a reference for a preliminary ruling is not in itself a reason for concluding that utilisation of that remedy is not reasonable.

67 As regards the reasonableness of the obligation to utilise the available legal remedies when infringement proceedings are pending before the Court, suffice it to state that the procedure under Article 226 EC is entirely independent of national procedures and does not replace them. As was stated when answering the third question, infringement proceedings amount in fact to an objective review of legality in the general interest. Although the result of such proceedings may serve an individual's interests, it none the less remains reasonable for him to avert the loss or damage by applying all the means available to him, that is to say utilising the available legal remedies.

68 It follows that the existence of infringement proceedings pending before the Court of Justice or the likelihood that the national court will make a reference to the Court of Justice for a preliminary ruling cannot, in itself, constitute a sufficient reason for concluding that it is not reasonable to have recourse to a legal remedy.

69 The answer to the fifth question therefore is that Community law does not preclude the application of national legislation which lays down that an individual cannot obtain reparation for

loss or damage which he has wilfully or negligently failed to avert by utilising a legal remedy, provided that utilisation of that remedy can reasonably be required of the injured party, a matter which is for the referring court to determine in light of all the circumstances of the main proceedings. The likelihood that a national court will make a reference for a preliminary ruling under Article 234 EC or the existence of infringement proceedings pending before the Court of Justice cannot, in itself, constitute a sufficient reason for concluding that it is not reasonable to have recourse to a legal remedy.

Costs

70 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the referring court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

1. **Individuals who have been harmed by the incorrect transposition and application of Council Directive 64/433/EEC of 26 June 1964 on health conditions for the production and marketing of fresh meat, as amended by Council Directive 91/497/EEC of 29 July 1991, and Council Directive 89/662/EEC of 11 December 1989 concerning veterinary checks in intra-Community trade with a view to the completion of the internal market may rely on the right to the free movement of goods in order to be able to render the State liable for the breach of Community law.**

2. **Where the Commission of the European Communities has brought infringement proceedings under Article 226 EC, Community law does not require the limitation period laid down by national legislation for a claim seeking reparation on account of State liability for breach of Community law to be interrupted or suspended during those proceedings.**

3. **Community law does not preclude the limitation period applicable to an action for damages against the State for incorrect transposition of a directive from beginning to run on the date on which the first injurious effects of the incorrect transposition have been produced and the further injurious effects thereof are foreseeable, even if that date is prior to the correct transposition of the directive.**

4. **Community law does not preclude the application of national legislation which lays down that an individual cannot obtain reparation for loss or damage which he has wilfully or negligently failed to avert by utilising a legal remedy, provided that utilisation of that remedy can reasonably be required of the injured party, a matter which is for the referring court to determine in light of all the circumstances of the main proceedings. The likelihood that a national court will make a reference for a preliminary ruling under Article 234 EC or the existence of infringement proceedings pending before the Court of Justice cannot, in itself, constitute a sufficient reason for concluding that it is not reasonable to have recourse to a legal remedy.**

[Signatures]

* Language of the case: German.

JUDGMENT OF THE COURT (Grand Chamber)

22 June 2010 (*)

(Reference for a preliminary ruling – Article 267 TFEU – Examination of whether a national law is consistent both with European Union law and with the national constitution – National legislation granting priority to an interlocutory procedure for the review of constitutionality – Article 67 TFEU – Freedom of movement for persons – Abolition of border control at internal borders – Regulation (EC) No 562/2006 – Articles 20 and 21 – National legislation authorising identity checks in the area between the land border of France with States party to the Convention Implementing the Schengen Agreement and a line drawn 20 kilometres inside that border)

In Joined Cases C-188/10 and C-189/10,

REFERENCES for a preliminary ruling under Article 267 TFEU from the Cour de cassation (France), made by decisions of 16 April 2010, received at the Court on the same day, in proceedings against

Aziz Melki (C-188/10),

Sélim Abdeli (C-189/10),

THE COURT (Grand Chamber),

composed of V. Skouris, President, J.N. Cunha Rodrigues, K. Lenaerts, J.-C. Bonichot, R. Silva de Lapuerta and C. Toader, Presidents of Chambers, K. Schiemann, E. Juhász, T. von Danwitz (Rapporteur), J.-J. Kasel and M. Safjan, Judges,

Advocate General: J. Mazák,

Registrar: M.-A. Gaudissart, Head of Unit,

having regard to the order of the President of the Court of 12 May 2010 deciding to apply an accelerated procedure to the references for a preliminary ruling in accordance with Article 23a of the Statute of the Court of Justice of the European Union and the first paragraph of Article 104a of the Rules of Procedure,

having regard to the written procedure and further to the hearing on 2 June 2010,

after considering the observations submitted on behalf of:

– Mr Melki and Mr Abdeli, by R. Boucq, avocat,

– the French Government, by E. Belliard, G. de Bergues and B. Beaupère-Manokha, acting as Agents,

– the Belgian Government, by C. Pochet, M. Jacobs and T. Materne, acting as Agents, and by F. Tulkens, avocat,

– the Czech Government, by M. Smolek, acting as Agent,

– the German Government, by J. Möller, B. Klein and N. Graf Vitzthum, acting as Agents,

– the Greek Government, by T. Papadopoulou and L. Kotroni, acting as Agents,

– the Netherlands Government, by C. Wissels and M. de Ree, acting as Agents,

– the Polish Government, by J. Faldyga, M. Jarosz and M. Szpunar, acting as Agents,

– the Slovak Government, by B. Ricziová, acting as Agent,

– the European Commission, by J.-P. Keppenne and M. Wilderspin, acting as Agents,

after hearing the Advocate General,

gives the following

Judgment

1 These references for a preliminary ruling concern the interpretation of Articles 67 TFEU and 267 TFEU.

2 The references have been made in the course of two sets of proceedings brought against Mr Melki and Mr Abdeli respectively – both of whom are of Algerian nationality – seeking the extension of their detention in premises not falling within the control of the prison service.

Legal context

European Union law

3 Under the preamble to Protocol (No 19) on the Schengen *acquis* integrated into the framework of the European Union, annexed to the Treaty of Lisbon (OJ 2010 C 83, p. 290; 'Protocol No 19'):

'The High Contracting Parties,

noting that the Agreements on the gradual abolition of checks at common borders signed by some Member States of the European Union in Schengen on 14 June 1985 and on 19 June 1990, as well as related agreements and the rules adopted on the basis of these agreements, have been integrated into the framework of the European Union by the Treaty of Amsterdam of 2 October 1997,

desiring to preserve the Schengen *acquis*, as developed since the entry into force of the Treaty of Amsterdam, and to develop this *acquis* in order to contribute towards achieving the objective of offering citizens of the Union an area of freedom, security and justice without internal borders,

…

have agreed upon the following provisions, which shall be annexed to the Treaty on European Union and to the Treaty on the Functioning of the European Union'.

4 Article 2 of that protocol states:

'The Schengen *acquis* shall apply to the Member States referred to in Article 1, without prejudice to Article 3 of the Act of Accession of 16 April 2003 or to Article 4 of the Act of Accession of 25 April 2005. The Council will substitute itself for the Executive Committee established by the Schengen agreements.'

5 The Schengen *acquis* comprises, inter alia, the Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic

Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders (OJ 2000 L 239, p. 19), signed at Schengen (Luxembourg) on 19 June 1990 ('the CISA'), Article 2 of which concerned the crossing of internal borders.

6 Under Article 2(1) to (3) of the CISA:

'1. Internal borders may be crossed at any point without any checks on persons being carried out.

2. However, where public policy or national security so require a Contracting Party may, after consulting the other Contracting Parties, decide that for a limited period national border checks appropriate to the situation shall be carried out at internal borders. If public policy or national security require immediate action, the Contracting Party concerned shall take the necessary measures and at the earliest opportunity shall inform the other Contracting Parties thereof.

3. The abolition of checks on persons at internal borders shall not affect the provisions laid down in Article 22, or the exercise of police powers throughout a Contracting Party's territory by the competent authorities under that Party's law, or the requirement to hold, carry and produce permits and documents provided for in that Party's law.'

7 Article 2 of the CISA was repealed as from 13 October 2006, in accordance with Article 39(1) of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code) (OJ 2006 L 105, p. 1).

8 Under Article 2, points 9 to 11, of that regulation:

'For the purposes of this Regulation the following definitions shall apply:

…

9. "border control", means the activity carried out at a border, in accordance with and for the purposes of this Regulation, in response exclusively to an intention to cross or the act of crossing that border, regardless of any other consideration, consisting of border checks and border surveillance;

10. "border checks", means the checks carried out at border crossing points, to ensure that persons, including their means of transport and the objects in their possession, may be authorised to enter the territory of the Member States or authorised to leave it;

11. "border surveillance", means the surveillance of borders between border crossing points and the surveillance of border crossing points outside the fixed opening hours, in order to prevent persons from circumventing border checks'.

9 Article 20 of Regulation No 562/2006, entitled 'Crossing internal borders', provides:

'Internal borders may be crossed at any point without a border check on persons, irrespective of their nationality, being carried out.'

10 Article 21 of that regulation, entitled 'Checks within the territory', provides:

'The abolition of border control at internal borders shall not affect:

(a) the exercise of police powers by the competent authorities of the Member States under national law, in so far as the exercise of those powers does not have an effect equivalent to border checks; that shall also apply in border areas. Within the meaning of the first sentence, the exercise of police powers may not, in particular, be considered equivalent to the exercise of border checks when the police measures:

(i) do not have border control as an objective;

(ii) are based on general police information and experience regarding possible threats to public security and aim, in particular, to combat cross-border crime;

(iii) are devised and executed in a manner clearly distinct from systematic checks on persons at the external borders;

(iv) are carried out on the basis of spot-checks;

…

(c) the possibility for a Member State to provide by law for an obligation to hold or carry papers and documents;

…'

National law

Constitution of 4 October 1958

11 Article 61-1 of the Constitution of 4 October 1958, as amended by Constitutional Law No 2008-724 of 23 July 2008 on the modernisation of the institutions of the Fifth Republic (JORF of 24 July 2008, p. 11890) ('the Constitution'), provides:

'If, in the course of proceedings before a court or tribunal, it is claimed that a legislative provision prejudices the rights and freedoms which the Constitution guarantees, the matter may be brought before the Conseil constitutionnel [Constitutional Council] further to a reference from the Conseil d'État [Council of State] or the Cour de Cassation [Court of Cassation], which shall rule within a fixed period.

An Organic Law shall determine the conditions for implementing the present article.'

12 The second and third paragraphs of Article 62 of the Constitution provide:

'A provision declared unconstitutional on the basis of Article 61-1 shall be repealed as of the publication of the decision of the Conseil constitutionnel or as of a subsequent date determined by that decision. The Conseil constitutionnel shall determine the conditions and limits within which the effects produced by the provision may be affected.

No appeal shall lie from the decisions of the Conseil constitutionnel. They shall be binding on public authorities and on all administrative authorities and courts.'

13 Under Article 88-1 of the Constitution:

'The Republic shall participate in the European Union constituted by States which have freely chosen to exercise some of their powers in common pursuant to the Treaty on European Union and the Treaty on the Functioning of the European Union, as they result from the treaty signed in Lisbon on 13 December 2007.'

Order No 58-1067

14 Organic Law No 2009-1523 of 10 December 2009 on the application of Article 61-1 of the Constitution (JORF of 11 December 2009, p. 21379) inserted a new Chapter IIa, entitled 'Priority Questions on Constitutionality', into Title II of Order No 58-1067 of 7 November 1958 on the organic law governing the Conseil constitutionnel. That Chapter IIa provides:

'Section 1

Provisions applicable before the courts and tribunals subject to the authority of the Conseil d'État or the Cour de cassation

Article 23-1

Before the courts and tribunals subject to the authority of the Conseil d'État or the Cour de cassation, a plea alleging that a legislative provision prejudices the rights and freedoms guaranteed by the Constitution shall be submitted in a separate, reasoned document, failing which it shall be inadmissible. Such a plea may be raised for the first time in appeal proceedings. A court or tribunal may not raise the issue of its own motion.

…

Article 23-2

The court or tribunal shall rule without delay, by way of reasoned decision, on whether to submit the priority question on constitutionality to the Conseil d'État or the Cour de cassation. The question shall be so submitted if the following conditions are met:

1. The contested provision is applicable to the dispute or to the proceedings, or forms the basis of the action;

2. It has not already been declared constitutional in the grounds or the operative part of a decision of the Conseil constitutionnel, except where there has been a change in circumstances;

3. The question is not devoid of substance.

In any event, where pleas are made before the court or tribunal challenging whether a legislative provision is consistent, first, with the rights and freedoms guaranteed by the Constitution and, secondly, with France's international commitments, it must rule as a matter of priority on whether to submit the question on constitutionality to the Conseil d'État or the Cour de cassation.

The decision to submit the question shall be sent to the Conseil d'État or to the Cour de cassation within eight days of its being made, together with the pleadings or the submissions of the parties. It shall not be open to appeal. A refusal to submit the question may be challenged only at the time of an appeal against the decision disposing of all or part of the case.

Article 23-3

Where the question is submitted, the court or tribunal shall stay proceedings until receipt of the decision of the Conseil d'État or the Cour de cassation or, if the matter has been referred to it, of the Conseil constitutionnel. The preparatory inquiries shall not be suspended and the court or tribunal may take the necessary interim or protective measures.

However, proceedings shall not be stayed either where a person is deprived of his liberty by reason of the proceedings, or where the purpose of the proceedings is to bring to an end a measure depriving someone of his liberty.

The court or tribunal may also rule without awaiting the decision on the priority question on constitutionality if law or regulation provides that it is to rule within a fixed period or as a matter of urgency. If the court at first instance rules without waiting and an appeal is brought against its decision, the appeal court shall stay proceedings. It may, however, not stay the proceedings if it is itself required to rule within a fixed period or as a matter of urgency.

In addition, where a stay of proceedings would risk leading to irreparable or manifestly excessive consequences for the rights of a party, the court or tribunal which decides to submit

the question may rule on those points which must be decided immediately.

If an appeal on a point of law has been brought where the courts adjudicating on the substance have ruled without awaiting the decision of the Conseil d'État or the Cour de cassation or, if the matter has been referred to it, the decision of the Conseil constitutionnel, any decision on that appeal shall be stayed until a ruling has been given on the priority question on constitutionality. That shall not apply where the party concerned is deprived of his liberty by reason of the proceedings and legislation provides that the Cour de cassation is to rule within a fixed period.'

Section 2

Provisions applicable before the Conseil d'État and the Cour de cassation

Article 23-4

Within a period of three months from receipt of the submission provided for in Article 23-2 or in the last paragraph of Article 23-1, the Conseil d'État or the Cour de cassation shall rule on whether to refer the priority question on constitutionality to the Conseil constitutionnel. A reference shall be made where the conditions laid down in Article 23-2(1) and (2) are met and where the question is new or of substance.

Article 23-5

A plea alleging that a legislative provision prejudices the rights and freedoms guaranteed by the Constitution may be raised, including for the first time on appeal on a point of law, in proceedings before the Conseil d'État or the Cour de cassation. The plea shall be submitted in a separate, reasoned document, failing which it shall be inadmissible. The court may not raise the issue of its own motion.

In any event, where pleas are made before the Conseil d'État or the Cour de cassation challenging whether a legislative provision is consistent, first, with the rights and freedoms guaranteed by the Constitution and, secondly, with France's international commitments, it must rule as a matter of priority on the referral of the question on constitutionality to the Conseil constitutionnel.

The Conseil d'État or the Cour de cassation shall have a period of three months from the date on which the plea is submitted to deliver its decision. The priority question on constitutionality shall be referred to the Conseil constitutionnel where the conditions laid down in Article 23-2(1) and (2) are met and the question is new or of substance.

Where a reference has been made to the Conseil constitutionnel, the Conseil d'État or the Cour de cassation shall stay proceedings until it has made its ruling. That shall not apply where the party concerned is deprived of his liberty by reason of the proceedings and legislation provides that the Cour de Cassation is to rule within a fixed period. If the Conseil d'État or the Cour de cassation is required to rule as a matter of urgency, it is possible for the proceedings not to be stayed.

…

Article 23-7

The reasoned decision of the Conseil d'État or the Cour de cassation to refer the matter to the Conseil constitutionnel shall be sent to it together with the pleadings or submissions of the parties. The Conseil constitutionnel shall receive a copy of any reasoned decision of the Conseil d'État or the Cour de cassation not to refer a priority question on constitutionality to it. If the Conseil d'État or the Cour de cassation has not ruled within the periods prescribed in Articles 23-4 and 23-5, the question is submitted to the Conseil constitutionnel.

…

Section 3

Provisions applicable before the Conseil constitutionnel

[…]

Article 23-10

The Conseil constitutionnel shall issue a ruling within three months of the date on which the matter was referred to it. The parties shall be permitted to submit their observations in adversarial proceedings. The hearing shall be public, save in exceptional cases defined in the Rules of Procedure of the Conseil constitutionnel.

…'

The Code of Criminal Procedure

15 Article 78-2 of the Code of Criminal Procedure (code de procédure pénale), in the version in force at the material time, provides:

'Senior police officers and, upon their orders and under their responsibility, the police officers and assistant police officers referred to in Articles 20 and 21-1 may ask any person to prove his identity by any means, where one or more plausible reasons exist for suspecting that:

– the person has committed or attempted to commit an offence;

– or the person is preparing to commit a "crime" [most serious criminal offence] or a "délit" [less serious offence];

– or the person is likely to provide information useful for the investigation in the event of a "crime" or a "délit";

– or the person is the subject of inquiries ordered by a judicial authority.

On the public prosecutor's written recommendations for the purposes of the investigation and prosecution of offences specified by him, the identity of any person may also be checked, in accordance with the same rules, in the places and for a period of time determined by the public prosecutor. The fact that the identity check uncovers offences other than those referred to in the public prosecutor's recommendations shall not constitute a ground for invalidating the related proceedings.

The identity of any person, regardless of his behaviour, may also be checked pursuant to the rules set out in the first paragraph, to prevent a breach of public order, in particular, an offence against the safety of persons or property.

In an area between the land border of France with the States party to the Convention signed at Schengen on 19 June 1990 and a line drawn 20 kilometres inside that border, and in the publicly accessible areas of ports, airports and railway or bus stations open to international traffic, designated by order, the identity of any person may also be checked, in accordance with the rules provided for in the first paragraph, in order to ascertain whether the obligations laid down by law to hold, carry and produce papers and documents are fulfilled. Where that control takes place on board an international train, it may be carried out on the section of the journey between the border and the first stop situated beyond the 20 kilometres from the border. However, on international trains on lines with particular service characteristics the control may also be carried out between that stop and a stop situated within the next 50 kilometres. Those lines and those stops shall be designated by Ministerial order. Where there is a section of motorway

starting in the area referred to in the first sentence of this paragraph and the first motorway tollbooth is situated beyond the 20 kilometre line, the control may also take place up to that first tollbooth, on parking areas and on the site of that tollbooth and the adjoining parking areas. The tollbooths concerned by this provision shall be designated by order. The fact that the identity check reveals an offence other than the non-observance of the aforementioned obligations shall not constitute a ground for invalidating the related proceedings.

…'

The actions in the main proceedings and the questions referred for a preliminary ruling

16 Mr Melki and Mr Abdeli, Algerian nationals unlawfully present in France, were subject to a police control, pursuant to Article 78-2, fourth paragraph, of the Code of Criminal Procedure, in the area between the land border of France with Belgium and a line drawn 20 kilometres inside that border. On 23 March 2010, they were each made the subject of a deportation order from the Prefect and a decision for continued detention.

17 Before the juge des libertés et de la détention (Judge deciding on provisional detention), to which the Prefect had made an application for extension of that detention, Mr Melki and Mr Abdeli disputed the lawfulness of the check made on them and raised the issue of the constitutionality of Article 78-2, fourth paragraph, of the Code of Criminal Procedure, on the ground that that provision prejudices the rights and freedoms guaranteed by the Constitution.

18 By two orders of 25 March 2010, the juge des libertés et de la détention ordered, first, that the question whether Article 78-2, fourth paragraph, of the Code of Criminal Procedure prejudices the rights and freedoms guaranteed by the Constitution be submitted to the Cour de Cassation and, second, that the detention of Mr Melki and Mr Abdeli be extended by 15 days.

19 According to the referring court, Mr Melki and Mr Abdeli claim that Article 78-2, fourth paragraph, of the Code of Criminal Procedure is contrary to the Constitution, given that the French Republic's commitments resulting from the Treaty of Lisbon have constitutional value in the light of Article 88-1 of the Constitution, and that that provision of the Code of Criminal Procedure, in so far as it authorises border controls at the borders with other Member States, is contrary to the principle of freedom of movement for persons set out in Article 67(2) TFEU, which provides that the European Union is to ensure the absence of internal border controls for persons.

20 The referring court considers, first, that the issue arises whether Article 78-2, fourth paragraph, of the Code of Criminal Procedure is consistent both with European Union Law ('EU law') and with the Constitution.

21 Second, the Cour de cassation infers from Articles 23-2 and 23-5 of Order No 58-1067, and from Article 62 of the Constitution, that courts adjudicating on the substance, like itself, are denied, by the effect of Organic Law No 2009-1523 which introduced those articles into Order No 58-1067, the opportunity to refer a question to the Court of Justice of the European Union for a preliminary ruling, where a priority question on constitutionality has been referred to the Conseil constitutionnel.

22 As it takes the view that its decision on whether to refer the priority question on constitutionality to the Conseil constitutionnel depends on the interpretation of EU law, the Cour de cassation decided, in both cases which are pending, to stay proceedings and to refer the following questions to the Court for a preliminary ruling:

'1. Does Article 267 [TFEU] preclude legislation such as that resulting from Article 23-2, paragraph 2, and Article 23-5, paragraph 2, of Order No 58-1067 of 7 November 1958, created by Organic Law No 2009-1523 of 10 December 2009, in so far as those provisions require courts to rule as a matter of priority on the submission to the Conseil constitutionnel of the question on constitutionality referred to them, inasmuch as that

question relates to whether domestic legislation, because it is contrary to European Union law, is in breach of the Constitution?

2. Does Article 67 [TFEU] preclude legislation such as that resulting from Article 78-2, paragraph 4, of the Code of Criminal Procedure, which provides that "in an area between the land border of France with the States party to the Convention signed at Schengen on 19 June 1990 and a line drawn 20 kilometres inside that border, and in the publicly accessible areas of ports, airports and railway or bus stations open to international traffic, designated by order, the identity of any person may also be checked, in accordance with the rules provided for in the first paragraph, in order to ascertain whether the obligations laid down by law to hold, carry and produce papers and documents are observed. Where that control takes place on board an international train, it may be carried out on the section of the journey between the border and the first stop situated beyond the 20 kilometres from the border. However, on international trains on lines with particular service characteristics the control may also be carried out between that stop and a stop situated within the next 50 kilometres. Those lines and those stops shall be designated by Ministerial order. Where there is a section of motorway starting in the area referred to in the first sentence of this paragraph and the first motorway tollbooth is situated beyond the 20 kilometre line, the control may also take place up to that first tollbooth, on parking areas and on the site of that tollbooth and the adjoining parking areas. The tollbooths concerned by this provision shall be designated by order".'

23 By order of the President of the Court of 20 April 2010, Cases C-188/10 and C-189/10 were joined for the purposes of the written and oral procedures and of the judgment.

The questions referred for a preliminary ruling

Admissibility

24 The French Government contends that the references for a preliminary ruling are inadmissible.

25 As regards the first question, the French Government submits that it is purely hypothetical. That question is based on the premiss that the Conseil constitutionnel, when examining whether a law is consistent with the Constitution, may find it necessary to examine whether that law is consistent with EU law. However, according to the case-law of the Conseil constitutionnel, it is not for the Conseil, in the context of review of the constitutionality of laws, but rather for the ordinary and administrative courts to examine whether a law is consistent with EU law. It follows that, under national law, the Conseil d'État and the Cour de cassation are not obliged to refer to the Conseil constitutionnel questions on the compatibility of provisions of national law with EU law, since such questions are not related to the review of constitutionality.

26 As regards the second question, the French Government contends that a reply to that question would serve no purpose. Since 9 April 2010, Mr Melki and Mr Abdeli have no longer been the subject of any measure depriving them of their liberty and, as from that date, the two orders of the juge des libertés et de la détention have ceased to have any effect. The issue of the compatibility of Article 78-2, fourth paragraph, of the Code of Criminal Procedure with Article 67 TFEU is also irrelevant for the only set of proceedings still pending before the Cour de cassation, given that, as the Conseil constitutionnel recalled in its decision No 2010-605 DC of 12 May 2010, the Conseil maintains that it does not have jurisdiction to examine the compatibility of legislation with EU law, where it is required to review the constitutionality of that legislation.

27 In that regard, suffice it to point out that, according to settled case-law, questions on the interpretation of EU law referred by a national court in the factual and legislative context which that court is responsible for defining, and the accuracy of which is not a matter for the Court to determine, enjoy a presumption of relevance. The Court may refuse to rule on a question referred by a national court only where it is quite obvious that the interpretation of EU law that is

sought bears no relation to the actual facts of the main action or its purpose, where the problem is hypothetical, or where the Court does not have before it the factual or legal material necessary to give a useful answer to the questions submitted to it (see, inter alia, Case C-333/07 *Regie Networks* [2008] ECR I-10807, paragraph 46; Case C-478/07 *Budejovicky Budvar* [2009] ECR I-0000, paragraph 63; and Case C-56/09 *Zanotti* [2010] ECR I-0000, paragraph 15).

28 In this instance, the questions referred concern the interpretation of Articles 67 TFEU and 267 TFEU. It is not apparent from the grounds of the orders for reference that the orders issued by the juge des libertés et de la détention in respect of Mr Melki and Mr Abdeli have ceased to have any effect. Furthermore, it is not obvious that the Cour de cassation's interpretation of how the priority question on constitutionality functions is clearly precluded in the light of the wording of the provisions of national law.

29 Therefore, the presumption of relevance enjoyed by the reference for a preliminary ruling in each of the cases is not rebutted by the objections submitted by the French Government.

30 In those circumstances, the references for a preliminary ruling made in these cases must be declared admissible.

The first question

31 By its first question, the referring court asks, in essence, whether Article 267 TFEU precludes Member State legislation which establishes an interlocutory procedure for the review of the constitutionality of national laws, requiring the courts of that Member State to rule as a matter of priority on whether to refer, to the national court responsible for reviewing the constitutionality of laws, a question on whether a provision of national law is consistent with the Constitution, when at the same time the conflict of that provision with EU law is at issue.

Observations submitted to the Court

32 Mr Melki and Mr Abdeli consider that the national legislation at issue in the main proceedings is consistent with EU law, provided that the Conseil constitutionnel examines EU law and, where there is a doubt on the interpretation of that law, makes a reference to the Court of Justice for a preliminary ruling, requesting that the accelerated procedure be applied to that reference pursuant to Article 104a of the Rules of Procedure of the Court of Justice.

33 The French Government is of the opinion that EU law does not preclude the national legislation at issue, since that legislation does not alter or affect the role and the jurisdiction of the national courts in applying EU law. In support of that line of argument, the French Government relies, in essence, on the same interpretation of that legislation as that given – subsequent to the submission of the orders for reference by the Cour de cassation to the Court of Justice – both by the Conseil constitutionnel in its decision No 2010-605 DC of 12 May 2010, and by the Conseil d'État in its decision No 312305 of 14 May 2010.

34 Under that interpretation, the purpose of a priority question on constitutionality cannot be to refer to the Conseil constitutionnel a question on the compatibility of legislation with EU law. It is not for the Conseil, but for the ordinary and administrative courts to examine whether legislation is consistent with EU law, to apply EU law themselves on the basis of their own assessment, and to refer questions to the Court of Justice for a preliminary ruling at the same time as, or subsequent to, the submission of a priority question on constitutionality.

35 In that regard, the French Government contends in particular that, according to the national legislation at issue in the main proceedings, the national court can either rule, under certain conditions, on the substance of the case without awaiting the decision of the Cour de cassation, the Conseil d'État or the Conseil constitutionnel on the priority question on constitutionality, or take the interim or protective measures necessary to ensure the immediate protection of the rights granted to individuals under EU law.

36 Both the French and Belgian Governments claim that the procedural mechanism of the priority question on constitutionality is designed to guarantee to individuals that their request for an examination of the constitutionality of a national provision will actually be dealt with, without its being possible for referral to the Conseil constitutionnel to be precluded on the basis that the provision in question is incompatible with EU law. In addition, referral to the Conseil constitutionnel has the advantage that the Conseil can repeal a law which is incompatible with the Constitution, and that repeal then has an effect *erga omnes*. By contrast, the effects of a judgment of an ordinary or administrative court, which finds that a national provision is incompatible with EU law, are limited to the specific case decided by that court.

37 The Czech Government suggests that the Court reply that it follows from the principle of primacy of EU law that the national court is required to ensure that EU law is given full effect, by examining whether national law is compatible with EU law and by not applying those provisions of national law which are contrary to EU law, without having first to refer the matter to the national constitutional court or another national court. According to the German Government, the exercise of the right to make a reference to the Court of Justice for a preliminary ruling, which is conferred on every national court or tribunal by Article 267 TFEU, must not be obstructed by a provision of national law which makes a reference to the Court of Justice, for an interpretation of EU law, subject to the decision of another national court. The Polish Government is of the opinion that Article 267 TFEU does not preclude legislation such as that covered by the first question referred, given that the procedure laid down in that legislation does not adversely affect the substance of the rights and obligations of national courts resulting from Article 267 TFEU.

38 The Commission considers that EU law, and in particular the principle of primacy of that law and Article 267 TFEU, precludes national legislation such as that described in the orders for reference, where every challenge to the compatibility of a legislative provision with EU law enables the individual to rely on a breach of the Constitution by that legislative provision. In that case, the burden of ensuring that EU law is observed is implicitly but necessarily transferred from the court ruling on the substance of a case to the Conseil constitutionnel. Consequently, the mechanism of the priority question on constitutionality leads to a situation such as that held to be contrary to EU law by the Court in Case 106/77 *Simmenthal* [1978] ECR 629. The fact that the constitutional court may, itself, refer questions to the Court of Justice for a preliminary ruling does not remedy that situation.

39 If, on the other hand, a challenge to the compatibility of a legislative provision with EU law does not enable the individual *ipso facto* to challenge the compatibility of the same legislative provision with the Constitution, such that the court ruling on the substance of a case retains jurisdiction to apply EU law, then EU law does not preclude national legislation such as that covered by the first question referred, in so far as a number of criteria are met. According to the Commission, the national court must remain free, simultaneously, to refer to the Court of Justice for a preliminary ruling any question which it considers necessary, and to adopt any measure necessary to ensure provisional judicial protection of the rights guaranteed under EU law. It is also necessary, first, that the interlocutory procedure for the review of constitutionality does not lead to a stay of the substantive proceedings for an excessively long period and, second, that, at the end of that interlocutory procedure and irrespective of its outcome, the national court remains entirely free to assess whether the national legislative provision is consistent with EU law, to disapply that provision if that court holds that it is contrary to EU law, and to refer questions to the Court of Justice for a preliminary ruling if it considers that to be necessary.

The Court’s reply

40 Article 267 TFEU confers jurisdiction on the Court to give preliminary rulings concerning both the interpretation of the Treaties and acts of the institutions, bodies, offices or agencies of the Union and the validity of those acts. The second paragraph of that article provides that a national court or tribunal may refer such questions to the Court, if it considers that a decision on the question is necessary to enable it to give judgment, and the third paragraph of that article

provides that the national court or tribunal is bound to make a reference if there is no judicial remedy under national law against its decisions.

41 It follows that, first, while it might be convenient, in certain circumstances, for questions of purely national law to be settled at the time the reference is made to the Court (see Joined Cases 36/80 and 71/80 *Irish Creamery Milk Suppliers Association and Others* [1981] ECR 735, paragraph 6), national courts have the widest discretion in referring matters to the Court if they consider that a case pending before them raises questions involving interpretation of provisions of EU law, or consideration of their validity, necessitating a decision on their part (see, inter alia, Case 166/73 *Rheinmühlen-Düsseldorf* [1974] ECR 33, paragraph 3; Case C-348/89 *Mecanarte* [1991] ECR I-3277, paragraph 44; and Case C-210/06 *Cartesio* [2008] ECR I-9641, paragraph 88).

42 The Court has concluded therefrom that the existence of a rule of national law whereby courts or tribunals against whose decisions there is a judicial remedy are bound on points of law by the rulings of a court superior to them cannot, on the basis of that fact alone, deprive the lower courts of the right provided for in Article 267 TFEU to refer questions on the interpretation of EU law to the Court of Justice (see, to that effect, *Rheinmühlen-Düsseldorf*, paragraphs 4 and 5, and *Cartesio*, paragraph 94). The lower court must be free, in particular if it considers that a higher court's legal ruling could lead it to give a judgment contrary to EU law, to refer to the Court questions which concern it (Case C-378/08 *ERG and Others* [2010] ECR I-0000, paragraph 32).

43 Second, the Court has already held that a national court which is called upon, within the exercise of its jurisdiction, to apply provisions of EU law is under a duty to give full effect to those provisions, if necessary refusing of its own motion to apply any conflicting provision of national legislation, even if adopted subsequently, and it is not necessary for the court to request or await the prior setting aside of such provision by legislative or other constitutional means (see, inter alia, *Simmenthal*, paragraphs 21 and 24; Case C-187/00 *Kutz-Bauer* [2003] ECR I-2741, paragraph 73; Joined Cases C-387/02, C-391/02 and C-403/02 *Berlusconi and Others* [2005] ECR I-3565, paragraph 72; and Case C-314/08 *Filipiak* [2009] ECR I-0000, paragraph 81).

44 Any provision of a national legal system and any legislative, administrative or judicial practice which might impair the effectiveness of EU law by withholding from the national court having jurisdiction to apply such law the power to do everything necessary at the moment of its application to set aside national legislative provisions which might prevent European Union rules from having full force and effect are incompatible with those requirements which are the very essence of EU law (see *Simmenthal*, paragraph 22, and Case C-213/89 *Factortame and Others* [1990] ECR I-2433, paragraph 20). This would be the case in the event of a conflict between a provision of EU law and a national law, if the solution of the conflict were to be reserved for an authority with a discretion of its own, other than the court called upon to apply EU law, even if such an impediment to the full effectiveness of EU law were only temporary (see, to that effect, *Simmenthal*, paragraph 23).

45 Lastly, the Court has held that a national court which, in a case concerning EU law, considers that a provision of national law is not only contrary to EU law, but also unconstitutional, does not lose the right or escape the obligation under Article 267 TFEU to refer questions to the Court of Justice on the interpretation or validity of EU law by reason of the fact that the declaration, that a rule of national law is unconstitutional, is subject to a mandatory reference to the constitutional court. The effectiveness of EU law would be in jeopardy if the existence of an obligation to refer a matter to a constitutional court could prevent a national court hearing a case governed by EU law from exercising the right conferred on it by Article 267 TFEU to refer to the Court of Justice questions concerning the interpretation or validity of EU law in order to enable it to decide whether or not a provision of national law was compatible with that EU law (see *Mecanarte*, paragraphs 39, 45 and 46).

46 As regards the conclusions to be drawn from the case-law referred to above in relation to

national provisions such as those covered by the first question referred, it should be observed that the referring court starts from the premiss that, under those provisions, when considering a question on constitutionality which is based on the fact that the legislation in question is not consistent with EU law, the Conseil constitutionnel also assesses whether that legislation is compatible with EU law. If that is so, where the court ruling on the substance submits the question on constitutionality, it could, before that submission, neither rule on whether the legislation concerned is compatible with EU law, nor refer a question in relation to that legislation to the Court of Justice for a preliminary ruling. Moreover, if the Conseil constitutionnel were to hold that the legislation in question is consistent with EU law, the court ruling on the substance also could not, after the Conseil constitutionnel's decision – which is binding on all judicial authorities – has been delivered, refer a question to the Court of Justice for a preliminary ruling. The same would be true where the plea alleging that a legislative provision is unconstitutional is raised during proceedings before the Conseil d'État or the Cour de cassation.

47 Under that interpretation, the national legislation at issue in the main proceedings would result in the ordinary and administrative national courts being prevented, both before submitting a question on constitutionality and, as the case may be, after the decision of the Conseil constitutionnel on that question, from exercising their right or fulfilling their obligation, provided for in Article 267 TFEU, to refer questions to the Court of Justice for a preliminary ruling. It must be stated that it follows from the principles set out in the case-law cited in paragraphs 41 to 45 above that Article 267 TFEU precludes national legislation such as that described in the orders for reference.

48 However, as is apparent from paragraphs 33 to 36 above, the French and Belgian Governments have advanced a different interpretation of the French legislation covered by the first question referred, relying on, inter alia, the decision of the Conseil constitutionnel No 2010-605 DC of 12 May 2010, and the decision of the Conseil d'État No 312305 of 14 May 2010, which were delivered after the Cour de cassation submitted its orders for reference to the Court of Justice.

49 In that regard, it should be borne in mind that it is for the referring court to determine, in the cases before it, what the correct interpretation of national law is.

50 Under settled case-law, it is for the national court to interpret the national law which it has to apply, as far as is at all possible, in a manner which accords with the requirements of EU law (Case C-262/97 *Engelbrecht* [2000] ECR I-7321, paragraph 39; Case C-115/08 *ČEZ* [2009] ECR I-0000, paragraph 138; and Case C-91/08 *Wall* [2010] ECR I-0000, paragraph 70). In the light of the aforementioned decisions of the Conseil constitutionnel and the Conseil d'État, such an interpretation of the national provisions which introduced the mechanism for review of constitutionality at issue in the main proceedings cannot be ruled out.

51 An examination of the question whether it is possible to interpret the mechanism of the priority question on constitutionality in accordance with the requirements of EU law cannot undermine the essential characteristics of the system of cooperation between the Court of Justice and the national courts, established by Article 267 TFEU, as they result from the case-law cited in paragraphs 41 to 45 above.

52 According to the settled case-law of the Court, in order to ensure the primacy of EU law, the functioning of that system of cooperation requires the national court to be free to refer to the Court of Justice for a preliminary ruling any question that it considers necessary, at whatever stage of the proceedings it considers appropriate, even at the end of an interlocutory procedure for the review of constitutionality.

53 In so far as national law lays down an obligation to initiate an interlocutory procedure for the review of constitutionality, which would prevent the national court from immediately disapplying a national legislative provision which it considers to be contrary to EU law, the functioning of the system established by Article 267 TFEU nevertheless requires that that court be free, first, to adopt any measure necessary to ensure the provisional judicial protection of the rights

conferred under the European Union's legal order and, second, to disapply, at the end of such an interlocutory procedure, that national legislative provision if that court holds it to be contrary to EU law.

54 It should also be observed that the priority nature of an interlocutory procedure for the review of the constitutionality of a national law, the content of which merely transposes the mandatory provisions of a European Union directive, cannot undermine the jurisdiction of the Court of Justice alone to declare an act of the European Union invalid, and in particular a directive, the purpose of that jurisdiction being to guarantee legal certainty by ensuring that EU law is applied uniformly (see, to that effect, Case 314/85 *Foto-Frost* [1987] ECR 4199, paragraphs 15 to 20; Case C-344/04 *IATA and ELFAA* [2006] ECR I-403, paragraph 27; and Case C-119/05 *Lucchini* [2007] ECR I-6199, paragraph 53).

55 To the extent that the priority nature of an interlocutory procedure for the review of constitutionality leads to the repeal of a national law – which merely transposes the mandatory provisions of a European Union directive – on the basis that that law is contrary to the national constitution, the Court could, in practice, be denied the possibility, at the request of the courts ruling on the substance of cases in the Member State concerned, of reviewing the validity of that directive in relation to the same grounds relating to the requirements of primary law, and in particular the rights recognised by the Charter of Fundamental Rights of the European Union, to which Article 6 TEU accords the same legal value as that accorded to the Treaties.

56 Before the interlocutory review of the constitutionality of a law – the content of which merely transposes the mandatory provisions of a European Union directive – can be carried out in relation to the same grounds which cast doubt on the validity of the directive, national courts against whose decisions there is no judicial remedy under national law are, as a rule, required – under the third paragraph of Article 267 TFEU – to refer to the Court of Justice a question on the validity of that directive and, thereafter, to draw the appropriate conclusions resulting from the preliminary ruling given by the Court, unless the court which initiates the interlocutory review of constitutionality has itself referred that question to the Court pursuant to the second paragraph of Article 267 TFEU. In the case of a national implementing law with such content, the question of whether the directive is valid takes priority, in the light of the obligation to transpose that directive. In addition, imposing a strict time-limit on the examination by the national courts cannot prevent the reference for a preliminary ruling on the validity of the directive in question.

57 Accordingly, the reply to the first question referred is that Article 267 TFEU precludes Member State legislation which establishes an interlocutory procedure for the review of the constitutionality of national laws, in so far as the priority nature of that procedure prevents – both before the submission of a question on constitutionality to the national court responsible for reviewing the constitutionality of laws and, as the case may be, after the decision of that court on that question – all the other national courts or tribunals from exercising their right or fulfilling their obligation to refer questions to the Court of Justice for a preliminary ruling. On the other hand, Article 267 TFEU does not preclude such national legislation, in so far as the other national courts or tribunals remain free:

– to refer to the Court of Justice for a preliminary ruling, at whatever stage of the proceedings they consider appropriate, even at the end of the interlocutory procedure for the review of constitutionality, any question which they consider necessary,

– to adopt any measure necessary to ensure provisional judicial protection of the rights conferred under the European Union legal order, and

– to disapply, at the end of such an interlocutory procedure, the national legislative provision at issue if they consider it to be contrary to EU law.

It is for the referring court to ascertain whether the national legislation at issue in the main proceedings can be interpreted in accordance with those requirements of EU law.

The second question

58 By its second question, the referring court seeks to know, in essence, whether Article 67 TFEU precludes national legislation which permits police authorities, within an area of 20 kilometres from the land border of a Member State with States party to the CISA, to check the identity of any person in order to ascertain whether he fulfils the obligations laid down by law to hold, carry and produce papers and documents.

Observations submitted to the Court

59 Mr Melki and Mr Abdeli are of the opinion that Articles 67 TFEU and 77 TFEU provide, purely and simply, that there should be no internal border controls and that the Treaty of Lisbon, on that basis, made freedom of movement for persons absolute, irrespective of the nationality of the persons concerned. Accordingly, that freedom of movement precludes a restriction such as that provided for in Article 78-2, fourth paragraph, of the Code of Criminal Procedure, which authorises the national authorities to carry out systematic identity checks in border areas. Furthermore, they seek an order that Article 21 of Regulation No 562/2006 is invalid, on the ground that it infringes in itself the absolute nature of the right to come and go as enshrined in Articles 67 TFEU and 77 TFEU.

60 The French Government contends that the national provisions at issue in the main proceedings are justified by the need to combat a specific type of criminality at border crossings and along borders which present specific risks. The identity checks carried out on the basis of Article 78-2, fourth paragraph, of the Code of Criminal Procedure fully comply with Article 21(a) of Regulation No 562/2006. Their purpose is to establish the identity of a person, either in order to prevent the commission of offences or disruption to public order, or to seek the perpetrators of an offence. Those controls are also based on general information and police experience which have shown the particular benefit of checks in those areas. They are carried out on the basis of police information – coming from earlier police inquiries or from information obtained in the context of cooperation between the police forces of different Member States – which guide the placement and timing of the control. Those controls are not fixed, permanent or systematic. On the contrary, they are carried out as spot checks.

61 The German, Greek, Netherlands and Slovak Governments also propose a negative reply to the second question, pointing out that, even after the entry into force of the Treaty of Lisbon, non-systematic police checks in border areas are still permissible in compliance with the conditions laid down in Article 21 of Regulation No 562/2006. Those governments claim, inter alia, that identity checks in those areas, pursuant to the national legislation at issue in the main proceedings, are distinguishable by their purpose, their content, the way they are carried out and their effect from border control for the purpose of Article 20 of Regulation No 562/2006. Those checks can be authorised pursuant to the provisions of Article 21(a) or (c) of that regulation.

62 By contrast, the Czech Government and the Commission consider that Articles 20 and 21 of Regulation No 562/2006 preclude national legislation such as that at issue in the main proceedings. The checks under that legislation constitute disguised border controls which cannot be authorised under Article 21 of Regulation No 562/2006, given that they are only permitted in border areas and are subject to no condition other than that the person checked be in one of those areas.

The Court's reply

63 As a preliminary point, it should be noted that the referring court has not referred for a preliminary ruling a question on the validity of a provision of Regulation No 562/2006. As Article 267 TFEU does not constitute a means of redress available to the parties to a case pending before a national court, the Court cannot be compelled to evaluate the validity of EU law on the sole ground that that question has been put before it by one of the parties (Joined Cases C-376/05 and C-377/05 *Brünsteiner and Autohaus Hilgert* [2006] ECR I-11383, paragraph 28).

64 In relation to the interpretation sought by the referring court of Article 67 TFEU, paragraph 2 of which provides that the Union is to ensure the absence of internal border controls for persons, it should be pointed out that that article is part of Chapter 1, entitled 'General Provisions', of Title V of the Treaty on the Functioning of the European Union, and that it is apparent from the very wording of that article that it is the Union itself which is the addressee of the obligation which it lays down. Chapter 1 also contains Article 72, which reproduces the reservation contained in Article 64(1) EC, relating to the exercise of the responsibilities incumbent upon Member States with regard to the maintenance of law and order and the safeguarding of internal security.

65 Chapter 2 of Title V contains specific provisions on the policy on border checks, and in particular Article 77 TFEU, which is the successor to Article 62 EC. Under Article 77(2)(e), the European Parliament and the Council are to adopt measures concerning the absence of any controls on persons when crossing internal borders. It follows that the provisions adopted on that basis must be taken into account, in particular Articles 20 and 21 of Regulation No 562/2006, in order to determine whether EU law precludes national legislation such as that in Article 78-2, fourth paragraph, of the Code of Criminal Procedure.

66 The Community legislature implemented the principle of the absence of internal border controls by adopting, pursuant to Article 62 EC, Regulation No 562/2006 which seeks, according to Recital 22 in the preamble to that regulation, to build on the Schengen *acquis*. That regulation establishes, in Title III, a Community scheme on the crossing of internal borders, replacing Article 2 of the CISA as from 13 October 2006. The applicability of that regulation has not been affected by the entry into force of the Treaty of Lisbon. Protocol No 19 annexed thereto expressly provides that the Schengen *acquis* remains applicable.

67 Article 20 of Regulation No 562/2006 provides that internal borders may be crossed at any point without a border check on persons, irrespective of their nationality, being carried out. Under Article 2, point 10, of that regulation 'border checks' means the checks carried out at border crossing points, to ensure that persons may be authorised to enter the territory of the Member States or authorised to leave it.

68 As regards the controls provided for in Article 78-2, fourth paragraph, of the Code of Criminal Procedure, it must be observed that they are carried out not 'at borders' but within the national territory and they do not depend on movement across the border by the person checked. In particular, they are not carried out at the time when the border is crossed. Thus, those controls constitute not border checks prohibited under Article 20 of Regulation No 562/2006, but checks within the territory of a Member State, covered by Article 21 of that regulation.

69 Article 21(a) of Regulation No 562/2006 provides that the abolition of border control at internal borders is not to affect the exercise of police powers by the competent authorities of the Member States under national law, in so far as the exercise of those powers does not have an effect equivalent to border checks; that is also to apply in border areas. It follows that controls within the territory of a Member State are, pursuant to Article 21(a), prohibited only where they have an effect equivalent to border checks.

70 The exercise of police powers may not, under the second sentence of that provision, in particular, be considered equivalent to the exercise of border checks when the police measures do not have border control as an objective; are based on general police information and experience regarding possible threats to public security and aim, in particular, to combat cross-border crime; are devised and executed in a manner clearly distinct from systematic checks on persons at the external borders; and, lastly, are carried out on the basis of spot-checks.

71 In relation to the question whether the exercise of the control powers granted by Article 78-2, fourth paragraph, of the Code of Criminal Procedure has an effect equivalent to border checks, it must be held, first, that the objective of the control under that provision is not the same as that of border control within the meaning of Regulation No 562/2006. The objective of that border control, according to Article 2, points 9 to 11, of that regulation, is, first, to ensure that persons may be authorised to enter the territory of the Member State or authorised to leave it and,

second, to prevent persons from circumventing border checks. By contrast, the national provision in question relates to checking whether the obligations laid down by law to hold, carry and produce papers and documents are fulfilled. The possibility for a Member State to provide for such obligations in its national law is not, pursuant to Article 21(c) of Regulation No 562/2006, affected by the abolition of border control at internal borders.

72 Second, the fact that the territorial scope of the power granted by the national provision at issue in the main proceedings is limited to a border area does not suffice, in itself, to find that the exercise of that power has an equivalent effect within the meaning of Article 21(a) of Regulation No 562/2006, in view of the wording and objective of Article 21. However, as regards controls on board an international train or on a toll motorway, the national provision at issue in the main proceedings lays down specific rules regarding its territorial scope, a factor which might constitute evidence of the existence of such an equivalent effect.

73 Furthermore, Article 78-2, fourth paragraph, of the Code of Criminal Procedure, which authorises controls irrespective of the behaviour of the person concerned and of specific circumstances giving rise to a risk of breach of public order, contains neither further details nor limitations on the power thus conferred – in particular in relation to the intensity and frequency of the controls which may be carried out on that legal basis – for the purposes of preventing the practical application of that power, by the competent authorities, from leading to controls with an effect equivalent to border checks within the meaning of Article 21(a) of Regulation No 562/2006.

74 In order to comply with Articles 20 and 21(a) of Regulation No 562/2006, interpreted in the light of the requirement of legal certainty, national legislation granting a power to police authorities to carry out identity checks – a power which, first, is restricted to the border area of the Member State with other Member States and, second, does not depend upon the behaviour of the person checked or on specific circumstances giving rise to a risk of breach of public order – must provide the necessary framework for the power granted to those authorities in order, inter alia, to guide the discretion which those authorities enjoy in the practical application of that power. That framework must guarantee that the practical exercise of that power, consisting in carrying out identity controls, cannot have an effect equivalent to border checks, as evidenced by, in particular, the circumstances listed in the second sentence of Article 21(a) of Regulation No 562/2006.

75 In those circumstances, the answer to the second question referred is that Article 67(2) TFEU, and Articles 20 and 21 of Regulation No 562/2006, preclude national legislation which grants to the police authorities of the Member State in question the power to check, solely within an area of 20 kilometres from the land border of that State with States party to the CISA, the identity of any person, irrespective of his behaviour and of specific circumstances giving rise to a risk of breach of public order, in order to ascertain whether the obligations laid down by law to hold, carry and produce papers and documents are fulfilled, where that legislation does not provide the necessary framework for that power to guarantee that its practical exercise cannot have an effect equivalent to border checks.

Costs

76 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

1. Article 267 TFEU precludes Member State legislation which establishes an interlocutory procedure for the review of the constitutionality of national laws, in

so far as the priority nature of that procedure prevents – both before the submission of a question on constitutionality to the national court responsible for reviewing the constitutionality of laws and, as the case may be, after the decision of that court on that question – all the other national courts or tribunals from exercising their right or fulfilling their obligation to refer questions to the Court of Justice for a preliminary ruling. On the other hand, Article 267 TFEU does not preclude such national legislation, in so far as the other national courts or tribunals remain free:

– **to refer to the Court of Justice for a preliminary ruling, at whatever stage of the proceedings they consider appropriate, even at the end of the interlocutory procedure for the review of constitutionality, any question which they consider necessary,**

– **to adopt any measure necessary to ensure provisional judicial protection of the rights conferred under the European Union legal order, and**

– **to disapply, at the end of such an interlocutory procedure, the national legislative provision at issue if they consider it to be contrary to European Union law.**

It is for the referring court to ascertain whether the national legislation at issue in the main proceedings can be interpreted in accordance with those requirements of European Union law.

2. **Article 67(2) TFEU, and Articles 20 and 21 of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code), preclude national legislation which grants to the police authorities of the Member State in question the power to check, solely within an area of 20 kilometres from the land border of that State with States party to the Convention implementing the Schengen Agreement of 14 June 1985 between the Governments of the States of the Benelux Economic Union, the Federal Republic of Germany and the French Republic on the gradual abolition of checks at their common borders, signed at Schengen (Luxembourg) on 19 June 1990, the identity of any person, irrespective of his behaviour and of specific circumstances giving rise to a risk of breach of public order, in order to ascertain whether the obligations laid down by law to hold, carry and produce papers and documents are fulfilled, where that legislation does not provide the necessary framework for that power to guarantee that its practical exercise cannot have an effect equivalent to border checks.**

[Signatures]

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* Language of the case: French.

Case C-240/09

Lesoochranárske zoskupenie VLK

v

Ministerstvo životného prostredia Slovenskej republiky

(Reference for a preliminary ruling from the Najvyšší súd Slovenskej republiky)

(Environment – Aarhus Convention – Public participation in the decision-making process and access to justice in environmental matters – Direct effect)

Summary of the Judgment

1. *Preliminary rulings – Jurisdiction of the Court – Interpretation of an international agreement concluded by the Community and the Member States on the basis of joint competence – Convention on access to information, public participation in decision-making and access to justice on environmental matters (Aarhus Convention) – Jurisdiction to determine the distribution of competences between the Community and the Member States*

   (Art. 234 EC; Aarhus Convention, Art. 9(3); Council Decision 2005/370)

2. *Preliminary rulings – Jurisdiction of the Court – Limits – Interpretation requested on account of the applicability of a provision both to situations falling within the scope of national law and to situations falling within the scope of EU law – Jurisdiction to provide that interpretation*

   (Aarhus Convention, Art. 9(3); Council Decision 2005/370)

3. *International agreements – Agreements concluded by the Community – Convention on access to information, public participation in decision-making and public access to justice on environmental matters (Aarhus Convention) – Article 9(3) – Direct effect – None*

   (Art. 10 EC; Aarhus Convention, Art. 9(3); Council Decision 2005/370)

1. Since the Convention on access to information, public participation in decision-making and public access to justice on environmental matters (Aarhus Convention) was concluded by the Community and all the Member States on the basis of joint competence, it follows that where a case is brought before the Court in accordance with the provisions of the Treaty, in particular Article 234 EC thereof, the Court has jurisdiction to draw the line dividing the obligations the Community has assumed from those remaining the sole responsibility of the Member States and to interpret that convention.

   Next, it must be determined whether, in the field covered by Article 9(3) of the Aarhus Convention, the Union has exercised its powers and adopted provisions to implement the obligations which derive from it. If that should not be the case, the obligations deriving from Article 9(3) of the Aarhus Convention would continue to be covered by the national law of the Member States. In those circumstances, it would be for the courts of those Member States to determine, on the basis of national law, whether individuals could rely directly on the rules of that international agreement relevant to that field or whether the courts must apply those rules of their own motion. In that case, Union law neither requires nor forbids the legal order of a Member State to accord to individuals the right to rely directly on a rule laid down in the Aarhus Convention or to oblige the courts to apply

that rule of their own motion.

However, if it were to be held that the Union has exercised its powers and adopted provisions in the field covered by Article 9(3) of the Aarhus Convention, Union law would apply and it would be for the Court of Justice to determine whether the provision of the international agreement in question has direct effect.

In that connection, it must be observed first of all, that, in the field of environmental protection, the Union has explicit external competence pursuant to Article 175 EC, read in conjunction with Article 174(2) EC.

Furthermore, the Court has held that a specific issue which has not yet been the subject of Union legislation is part of Union law, when that issue is regulated in agreements concluded by the Union and the Member State and concerns a field in large measure covered by Union law.

(see paras 31-33, 35-36)

2. The Court has jurisdiction to interpret the provisions of Article 9(3) of the Convention on access to information, public participation in decision-making and public access to justice on environmental matters (Aarhus Convention) and, in particular, to give a ruling on whether or not they have direct effect.

When a provision can apply both to situations falling within the scope of national law and to situations falling within the scope of Union law, there is a certain interest in that provision's being interpreted uniformly, whatever the circumstances in which it is to apply, in order to forestall future differences of interpretation.

(see paras 42-43)

3. Article 9(3) of the Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention) does not have direct effect in Union law. It is, however, for the referring court to interpret, to the fullest extent possible, the procedural rules relating to the conditions to be met in order to bring administrative or judicial proceedings in accordance with the objectives of Article 9(3) of that convention and the objective of effective judicial protection of the rights conferred by European Union law, so as to enable an environmental protection organisation to challenge before a court a decision taken following administrative proceedings liable to be contrary to European Union environmental law.

Failing EU rules governing the matter, it is for the domestic legal system of each Member State to lay down the detailed procedural rules governing actions for safeguarding the rights that individuals derive from Union law, in this case the Habitats Directive, the Member States being responsible for ensuring that those rights are effectively protected in every case.

On that basis, as is apparent from well-established case-law, the detailed procedural rules governing actions for safeguarding an individual's rights under Union law must be no less favourable than those governing similar domestic actions (principle of equivalence) and must not make it in practice impossible or excessively difficult to exercise rights conferred by Union law (principle of effectiveness).

(see paras 47-48, 51-52, operative part)

JUDGMENT OF THE COURT (Grand Chamber)

8 March 2011 (*)

(Environment – Aarhus Convention – Public participation in the decision-making process and access to justice in environmental matters – Direct effect)

In Case C-240/09,

REFERENCE for a preliminary ruling under Article 234 EC from the Najvyšší súd Slovenskej republiky (Slovakia), made by decision of 22 June 2009, received at the Court on 3 July 2009, in the proceedings

Lesoochranárske zoskupenie VLK

v

Ministerstvo životného prostredia Slovenskej republiky,

THE COURT (Grand Chamber),

composed of V. Skouris, President, A. Tizzano, J.N. Cunha Rodrigues, K. Lenaerts, J.-C. Bonichot (Rapporteur), K. Schiemann and D. Šváby, Presidents of Chambers, A. Rosas, R. Silva de Lapuerta, U. Lõhmus, A. Ó Caoimh, M. Safjan and M. Berger, Judges,

Advocate General: E. Sharpston,

Registrar: R. Şereş, Administrator,

having regard to the written procedure and further to the hearing on 4 May 2010,

after considering the observations submitted on behalf of:

– Lesoochranárske zoskupenie VLK, by I. Rajtáková, advokátka,

– the Slovak Government, by B. Ricziová, acting as Agent,

– the German Government, by M. Lumma and B. Klein, acting as Agents,

– the Greek Government, by G. Karipsiadis and T. Papadopoulou, acting as Agents,

– the French Government, by G. de Bergues and S. Menez, acting as Agents,

– the Polish Government, by M. Dowgielewicz, D. Krawczyk and M. Nowacki, acting as Agents,

– the Finnish Government, by J. Heliskoski and M. Pere, acting as Agents,

– the Swedish Government, by A. Falk, acting as Agent,

– the United Kingdom Government, by L. Seeboruth and J. Stratford, acting as Agents,

– the European Commission, by P. Oliver and A. Tokár, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 15 July 2010,

gives the following

Judgment

1 This reference for a preliminary ruling concerns the interpretation of Article 9(3) of the Convention on access to information, public participation in decision-making and access to justice in environmental matters approved on behalf of the European Community by Council Decision 2005/370/EC of 17 February 2005 (OJ 2005 L 124, p. 1) ('the Aarhus Convention').

2 The reference has been made in proceedings between Lesoochranáske zoskupenie VLK ('zoskupenie'), an association established in accordance with Slovak law whose objective is the protection of the environment, and the Ministerstvo životného prostredia Slovenskej republiky (Ministry of the Environment of the Slovak Republic) ('the Ministerstvo životného prostredia'), concerning the association's request to be a 'party' to the administrative proceedings relating to the grant of derogations to the system of protection for species such as the brown bear, access to protected countryside areas, or the use of chemical substances in such areas.

Legal context

International law

3 Article 9 of the Aarhus Convention states:

'1. Each Party shall, within the framework of its national legislation, ensure that any person who considers that his or her request for information under Article 4 has been ignored, wrongfully refused, whether in part or in full, inadequately answered, or otherwise not dealt with in accordance with the provisions of that article, has access to a review procedure before a court of law or another independent and impartial body established by law.

In the circumstances where a Party provides for such a review by a court of law, it shall ensure that such a person also has access to an expeditious procedure established by law that is free of charge or inexpensive for reconsideration by a public authority or review by an independent and impartial body other than a court of law.

Final decisions under this paragraph 1 shall be binding on the public authority holding the information. Reasons shall be stated in writing, at least where access to information is refused under this paragraph.

2. Each Party shall, within the framework of its national legislation, ensure that members of the public concerned:

(a) having a sufficient interest or, alternatively,

(b) maintaining impairment of a right, where the administrative procedural law of a Party requires this as a precondition,

have access to a review procedure before a court of law and/or another independent and impartial body established by law, to challenge the substantive and procedural legality of any decision, act or omission subject to the provisions of Article 6 and, where so provided for under national law and without prejudice to paragraph 3 below, of other relevant provisions of this Convention.

What constitutes a sufficient interest and impairment of a right shall be determined in

accordance with the requirements of national law and consistently with the objective of giving the public concerned wide access to justice within the scope of this Convention. To this end, the interest of any non-governmental organisation meeting the requirements referred to in Article 2(5) shall be deemed sufficient for the purpose of subparagraph (a) above. Such organisations shall also be deemed to have rights capable of being impaired for the purpose of subparagraph (b) above.

The provisions of this paragraph 2 shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

3. In addition and without prejudice to the review procedures referred to in paragraphs 1 and 2 above, each Party shall ensure that, where they meet the criteria, if any, laid down in its national law, members of the public have access to administrative or judicial procedures to challenge acts and omissions by private persons and public authorities which contravene provisions of its national law relating to the environment.

…'

4 Article 19(4) and (5) of the Aarhus Convention states:

'4. Any organisation referred to in Article 17 which becomes a Party to this Convention without any of its Member States being a Party shall be bound by all the obligations under this Convention. If one or more of such an organisation's Member States is a Party to this Convention, the organisation and its Member States shall decide on their respective responsibilities for the performance of their obligations under this Convention. In such cases, the organisation and the Member States shall not be entitled to exercise rights under this Convention concurrently.

5. In their instruments of ratification, acceptance, approval or accession, the regional economic integration organisations referred to in Article 17 shall declare the extent of their competence with respect to the matters governed by this Convention. These organisations shall also inform the Depositary of any substantial modification to the extent of their competence.'

European Union ('EU') law

5 Article 12(1) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ 1992 L 206, p. 7) ('the Habitats Directive') provides:

'Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) in their natural range, prohibiting:

(a) all forms of deliberate capture or killing of specimens of these species in the wild;

(b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;

(c) deliberate destruction or taking of eggs from the wild;

(d) deterioration or destruction of breeding sites or resting places.'

6 Article 16(1) of the Habitats Directive further states:

'Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in

their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15(a) and (b):

(a) in the interest of protecting wild fauna and flora and conserving natural habitats;

(b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;

(c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

(d) for the purpose of research and education, of repopulating and re-introducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plants;

(e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.'

7 Annex IV to the Habitats Directive relating to animal and plant species of Community interest in need of strict protection, mentions, in particular, the species 'Ursus arctos'.

8 Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC (OJ 2003 L 41, p. 26) states in recital 5 in the preamble thereto:

'On 25 June 1998 the European Community signed the UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters ("the Aarhus Convention"). Provisions of Community law must be consistent with that Convention with a view to its conclusion by the European Community.'

9 Article 6 of Directive 2003/4 implements Article 9(1) of the Aarhus Convention, and reproduces almost word for word its provisions.

10 Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC states in recitals 5, 9 and 11 in the preamble thereto:

'(5) On 25 June 1998 the Community signed the UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters ("the Århus Convention"). Community law should be properly aligned with that Convention with a view to its ratification by the Community;

…

(9) Article 9(2) and (4) of the Århus Convention provides for access to judicial or other procedures for challenging the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of Article 6 of the Convention.

…

(11) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment [OJ 1985 L 175, p. 40], and Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control [OJ 1996 L 257, p. 26] should be amended to ensure that they are fully compatible with the provisions of the Århus Convention, in particular Article 6 and Article 9(2) and (4)

thereof.'

11 Articles 3(7) and 4(4) of Directive 2003/35 introduce respectively Article 10a into Directive 85/337 and Article 15a into Directive 96/61 in order to implement Article 9(2) of the Aarhus Convention, which they reproduce in almost identical terms.

12 Decision 2005/370 states, in recitals 4 to 7 in the preamble thereto:

'(4) Under the terms of the Aarhus Convention, a regional economic integration organisation must declare in its instrument of ratification, acceptance, approval or accession, the extent of its competence in respect of the matters governed by the Convention.

(5) The Community, in accordance with the Treaty, and in particular Article 175(1) thereof, is competent, together with its Member States, for entering into international agreements, and for implementing the obligations resulting therefrom, which contribute to the pursuit of the objectives listed in Article 174 of the Treaty.

(6) The Community and most of its Member States signed the Aarhus Convention in 1998 and since then have pursued their efforts in view of their approval of the Convention. In the meantime, relevant Community legislation is being made consistent with the Convention.

(7) The objective of the Aarhus Convention, as set forth in its Article 1 thereof, is consistent with the objectives of the Community's environmental policy, listed in Article 174 of the Treaty, pursuant to which the Community, which shares competence with its Member States, has already adopted a comprehensive set of legislation which is evolving and contributes to the achievement of the objective of the Convention, not only by its own institutions, but also by public authorities in its Member States.'

13 Article 1 of Decision 2005/370 provides:

'The UN/ECE Convention on access to information, public participation in decision-making and access to justice in environmental matters, (Aarhus Convention) is hereby approved on behalf of the Community.'

14 In its declaration of competence made pursuant to Article 19(5) of the Aarhus Convention and annexed to Decision 2005/370, the Commission stated, in particular, 'that the legal instruments in force do not cover fully the implementation of the obligations resulting from Article 9(3) of the Convention as they relate to administrative and judicial procedures to challenge acts and omissions by private persons and public authorities other than the institutions of the European Community as covered by Article 2(2)(d) of the Convention, and that, consequently, its Member States are responsible for the performance of these obligations at the time of approval of the Convention by the European Community and will remain so unless and until the Community, in the exercise of its powers under the EC Treaty, adopts provisions of Community law covering the implementation of those obligations'.

15 Articles 10 to 12 of Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies (OJ 2006 L 264, p. 13) aim to ensure access to justice by non-governmental organisations with respect to administrative acts adopted by the institutions and bodies of the European Union or omissions by the latter, in accordance with Article 9(3) of the Aarhus Convention.

Slovak law

16 Pursuant to Article 82(3) of Law No 543/2002 on the protection of nature and the countryside, as amended, (zákon č. 543/2002 Z.z. o ochrane prírody a krajiny), which applies to the dispute in the main proceedings, an association having legal personality is to be regarded as a

'participant' in administrative proceedings, within the meaning of that provision, if, for at least one year, it has had the object of protecting nature and the countryside, and it has given written notice of its participation in those proceedings within the period prescribed in that article. The status of 'participant' confers on it the right to be informed of all pending administrative proceedings relating to the protection of nature and the countryside.

17 In accordance with Article 15a(2) of the Code of Administrative Procedure (Správny poriadok), 'a participant' is entitled to be informed that administrative proceedings have been initiated, to have access to files submitted by the parties to the administrative proceedings, to attend hearings and on-the-spot inspections, and to produce evidence and other information on the basis of which the decision will be taken.

18 Under Article 250(2) of the Code of Civil Procedure (Občiansky súdny poriadok) any natural or legal person who/which claims that his/its rights, as a party to the administrative proceedings, have been prejudiced by the decision taken or by the procedure followed by the administrative authority is to have the status of an applicant. Any natural or legal person not appearing at the administrative proceedings and whose presence, as a party to the proceedings has been requested, may also be an applicant.

19 According to Article 250(m) of the Code of Civil Procedure, persons having the status of parties to the proceedings are those who were parties to the administrative proceedings and the administrative body whose decision is to be reviewed.

The dispute in the main proceedings and the questions referred for a preliminary ruling

20 The zoskupenie was informed of the initiation of a number of administrative proceedings brought by various hunting associations or other persons concerning the grant of derogations to the system of protection for species such as the brown bear, access to protected countryside areas or the use of chemical substances in such areas.

21 The zoskupenie therefore applied to the Ministerstvo životného prostredia to be a 'party' to the administrative proceedings concerning the grant of those derogations or authorisations and relied on the Aarhus Convention for that purpose. The Ministerstvo životného prostredia rejected that request and the administrative appeal subsequently brought by the zoskupenie against that rejection.

22 The zoskupenie then brought a contentious appeal against the two decisions, arguing in particular that the provisions in Article 9(3) of the Aarhus Convention had direct effect.

23 In those circumstances, the Najvyšší súd Slovenskej republiky decided to stay the proceedings and refer the following questions to the Court of Justice for a preliminary ruling:

'1. Is it possible to recognise Article 9 and in particular Article 9(3) of the Aarhus Convention of 25 June 1998, given that the principal objective pursued by that international treaty is to change the classic definition of *locus standi* by according the status of a party to proceedings to the public, or the public concerned, as having the direct effect of an international treaty ("self-executing effect") in a situation where the European Union acceded to that international treaty on 17 February 2005 but to date has not adopted Community legislation in order to transpose the treaty concerned into Community law?

2. Is it possible to recognise Article 9 and in particular Article 9(3) of the Aarhus Convention, which has become a part of Community law, as having the direct applicability or direct effect of Community law within the meaning of the settled case-law of the Court of Justice?

3. If the answer to the first or the second question is in the affirmative, is it then possible to

interpret Article 9(3) of the Aarhus Convention, given the principal objective pursued by that international treaty, as meaning that it is necessary also to include within the concept "act of a public authority" an act consisting in the delivery of decisions, that is to say, that the right of public access to judicial hearings intrinsically also includes the right to challenge the decision of an administrative body, the unlawfulness of which lies in its effect on the environment?'

24 By order of the President of the Court of 23 October 2009, the referring court's request that the accelerated procedure provided for in the first paragraph of Article 104a of the Rules of Procedure be applied to the present case was rejected.

Consideration of the questions referred

Admissibility

25 The Polish and United Kingdom Governments submit that the questions are admissible only in so far as they concern the provisions of Article 9(3) of the Aarhus Convention, and are inadmissible for the remainder on the ground that the interpretation of EU law requested bears no relation to the actual facts of the main action or its purpose.

26 In answer to those arguments, it is sufficient to note that the questions referred relate essentially only to Article 9(3) of the Aarhus Convention, and do not concern the other subparagraphs of that article.

27 In those circumstances, there are no grounds for the Court to rule that the questions referred are partially inadmissible because they concern provisions other than those in Article 9(3) of the Aarhus Convention.

The first and second questions

28 By its first two questions, which it is appropriate to examine together, the referring court asks essentially whether individuals, and in particular environmental protection associations, where they wish to challenge a decision to derogate from a system of environmental protection, such as that put in place by the Habitats Directive for a species mentioned in Annex IV thereto, may derive a right to bring proceedings under EU law, having regard, in particular, to the provisions of Article 9(3) of the Aarhus Convention on direct effect, to which its questions relate.

29 A preliminary point to be made is that Article 300(7) EC provides that '[a]greements concluded under the conditions set out in this Article shall be binding on the institutions of the Community and on Member States'.

30 The Aarhus Convention was signed by the Community and subsequently approved by Decision 2005/370. Therefore, according to settled case-law, the provisions of that convention now form an integral part of the legal order of the European Union (see, by analogy, Case C-344/04 *IATA and ELFAA* [2006] ECR I-403, paragraph 36, and Case C-459/03 *Commission* v *Ireland* [2006] ECR I-4635, paragraph 82). Within the framework of that legal order the Court therefore has jurisdiction to give preliminary rulings concerning the interpretation of such an agreement (see, inter alia, Case 181/73 *Haegeman* [1974] ECR 449, paragraphs 4 to 6, and Case 12/86 *Demirel* [1987] ECR 3719, paragraph 7).

31 Since the Aarhus Convention was concluded by the Community and all the Member States on the basis of joint competence, it follows that where a case is brought before the Court in accordance with the provisions of the EC Treaty, in particular Article 234 EC thereof, the Court has jurisdiction to define the obligations which the Community has assumed and those which remain the sole responsibility of the Member States in order to interpret the Aarhus Convention (see, by analogy, Joined Cases C-300/98 and C-392/98 *Dior and Others* [2000] ECR I-11307, paragraph 33, and Case C-431/05 *Merck Genéricos – Produtos Farmacêuticos* [2007] ECR

I-7001, paragraph 33).

32 Next, it must be determined whether, in the field covered by Article 9(3) of the Aarhus Convention, the European Union has exercised its powers and adopted provisions to implement the obligations which derive from it. If that were not the case, the obligations deriving from Article 9(3) of the Aarhus Convention would continue to be covered by the national law of the Member States. In those circumstances, it would be for the courts of those Member States to determine, on the basis of national law, whether individuals could rely directly on the rules of that international agreement relevant to that field or whether the courts must apply those rules of their own motion. In that case, EU law does not require or forbid the legal order of a Member State to accord to individuals the right to rely directly on a rule laid down in the Aarhus Convention or to oblige the courts to apply that rule of their own motion (see, by analogy, *Dior and Others*, paragraph 48 and *MerckGenéricos – Produtos Farmacêuticos*, paragraph 34).

33 However, if it were to be held that the European Union has exercised its powers and adopted provisions in the field covered by Article 9(3) of the Aarhus Convention, EU law would apply and it would be for the Court of Justice to determine whether the provision of the international agreement in question has direct effect.

34 Therefore, it is appropriate to examine whether, in the particular field into which Article 9(3) of the Aarhus Convention falls, the European Union has exercised its powers and adopted provisions to implement obligations deriving from it (see, by analogy, *MerckGenéricos – Produtos Farmacêuticos*, paragraph 39).

35 In that connection, it must be observed first of all, that, in the field of environmental protection, the European Union has explicit external competence pursuant to Article 175 EC, read in conjunction with Article 174(2) EC (see, *Commission* v *Ireland*, paragraphs 94 and 95).

36 Furthermore, the Court has held that a specific issue which has not yet been the subject of EU legislation is part of EU law, where that issue is regulated in agreements concluded by the European Union and the Member State and it concerns a field in large measure covered by it (see, by analogy, Case C-239/03 *Commission* v *France* [2004] ECR I-9325, paragraphs 29 to 31).

37 In the present case, the dispute in the main proceedings concerns whether an environmental protection association may be a ‘party’ to administrative proceedings concerning, in particular, the grant of derogations to the system of protection for species such as the brown bear. That species is mentioned in Annex IV(a) to the Habitats Directive, so that, under Article 12 thereof, it is subject to a system of strict protection from which derogations may be granted only under the conditions laid down in Article 16 of that directive.

38 It follows that the dispute in the main proceedings falls within the scope of EU law.

39 It is true that, in its declaration of competence made in accordance with Article 19(5) of the Aarhus Convention and annexed to Decision 2005/370, the Community stated, in particular, that ‘the legal instruments in force do not cover fully the implementation of the obligations resulting from Article 9(3) of the Convention as they relate to administrative and judicial procedures to challenge acts and omissions by private persons and public authorities other than the institutions of the European Community as covered by Article 2(2)(d) of the Convention, and that, consequently, its Member States are responsible for the performance of these obligations at the time of approval of the Convention by the European Community and will remain so unless and until the Community, in the exercise of its powers under the EC Treaty, adopts provisions of Community law covering the implementation of those obligations’.

40 However, it cannot be inferred that the dispute in the main proceedings does not fall within the scope of EU law because, as stated in paragraph 36 of this judgment, a specific issue which has not yet been subject to EU legislation may fall within the scope of EU law if it relates to a field covered in large measure by it.

41 In that connection, it is irrelevant that Regulation No 1367/2006, which is intended to implement the provisions of Article 9(3) of the Aarhus Convention, only concerns the institutions of the European Union and cannot be regarded as the adoption by the European Union of provisions implementing the obligations which derive from Article 9(3) of the Aarhus Convention with respect to national administrative or judicial proceedings.

42 Where a provision can apply both to situations falling within the scope of national law and to situations falling within the scope of EU law, it is clearly in the interest of the latter that, in order to forestall future differences of interpretation, that provision should be interpreted uniformly, whatever the circumstances in which it is to apply (see, in particular, Case C-130/95 *Giloy* [1997] ECR I-4291, paragraph 28, and Case C-53/96 *Hermès* [1998] ECR I-3603, paragraph 32).

43 It follows that the Court has jurisdiction to interpret the provisions of Article 9(3) of the Aarhus Convention and, in particular, to give a ruling on whether or not they have direct effect.

44 In that connection, a provision in an agreement concluded by the European Union with a non-member country must be regarded as being directly applicable when, regard being had to its wording and to the purpose and nature of the agreement, the provision contains a clear and precise obligation which is not subject, in its implementation or effects, to the adoption of any subsequent measure (see, in particular, Case C-265/03 *Simutenkov* [2005] ECR I-2579, paragraph 21, and Case C-372/06 *Asda Stores* [2007] ECR I-11223, paragraph 82).

45 It must be held that the provisions of Article 9(3) of the Aarhus Convention do not contain any clear and precise obligation capable of directly regulating the legal position of individuals. Since only members of the public who meet the criteria, if any, laid down by national law are entitled to exercise the rights provided for in Article 9(3), that provision is subject, in its implementation or effects, to the adoption of a subsequent measure.

46 However, it must be observed that those provisions, although drafted in broad terms, are intended to ensure effective environmental protection.

47 In the absence of EU rules governing the matter, it is for the domestic legal system of each Member State to lay down the detailed procedural rules governing actions for safeguarding rights which individuals derive from EU law, in this case the Habitats Directive, since the Member States are responsible for ensuring that those rights are effectively protected in each case (see, in particular, Case C-268/06 *Impact* [2008] ECR I-2483, paragraphs 44 and 45).

48 On that basis, as is apparent from well-established case-law, the detailed procedural rules governing actions for safeguarding an individual's rights under EU law must be no less favourable than those governing similar domestic actions (principle of equivalence) and must not make it in practice impossible or excessively difficult to exercise rights conferred by EU law (principle of effectiveness) (*Impact*, paragraph 46 and the case-law cited).

49 Therefore, if the effective protection of EU environmental law is not to be undermined, it is inconceivable that Article 9(3) of the Aarhus Convention be interpreted in such a way as to make it in practice impossible or excessively difficult to exercise rights conferred by EU law.

50 It follows that, in so far as concerns a species protected by EU law, and in particular the Habitats Directive, it is for the national court, in order to ensure effective judicial protection in the fields covered by EU environmental law, to interpret its national law in a way which, to the fullest extent possible, is consistent with the objectives laid down in Article 9(3) of the Aarhus Convention.

51 Therefore, it is for the referring court to interpret, to the fullest extent possible, the procedural rules relating to the conditions to be met in order to bring administrative or judicial proceedings in accordance with the objectives of Article 9(3) of the Aarhus Convention and the objective of effective judicial protection of the rights conferred by EU law, so as to enable an environmental

protection organisation, such as the zoskupenie, to challenge before a court a decision taken following administrative proceedings liable to be contrary to EU environmental law (see, to that effect, Case C-432/05 *Unibet* [2007] ECR I-2271, paragraph 44, and *Impact*, paragraph 54).

52 In those circumstances, the answer to the first and second questions referred is that Article 9(3) of the Aarhus Convention does not have direct effect in EU law. It is, however, for the referring court to interpret, to the fullest extent possible, the procedural rules relating to the conditions to be met in order to bring administrative or judicial proceedings in accordance with the objectives of Article 9(3) of that convention and the objective of effective judicial protection of the rights conferred by EU law, in order to enable an environmental protection organisation, such as the zoskupenie, to challenge before a court a decision taken following administrative proceedings liable to be contrary to EU environmental law.

The third question

53 In the light of the reply given to the first and second questions, it is not necessary to reply to the third question.

Costs

54 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

Article 9(3) of the Convention on access to information, public participation in decision-making and access to justice in environmental matters approved on behalf of the European Community by Council Decision 2005/370/EC of 17 February 2005 does not have direct effect in European Union law. It is, however, for the referring court to interpret, to the fullest extent possible, the procedural rules relating to the conditions to be met in order to bring administrative or judicial proceedings in accordance with the objectives of Article 9(3) of that convention and the objective of effective judicial protection of the rights conferred by European Union law, in order to enable an environmental protection organisation, such as the Lesoochranárske zoskupenie, to challenge before a court a decision taken following administrative proceedings liable to be contrary to European Union environmental law.

[Signatures]

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* Language of the case: Slovak.

JUDGMENT OF THE COURT (Grand Chamber)

24 January 2012 *(1)

(Social policy – Directive 2003/88/EC – Article 7 – Right to paid annual leave – Precondition for entitlement imposed by national rules – Absence of the worker – Length of the leave entitlement based on the nature of the absence – National rules incompatible with Directive 2003/88 – Role of the national court)

In Case C-282/10,

REFERENCE for a preliminary ruling under Article 267 TFEU from the Cour de cassation (France), made by decision of 2 June 2010, received at the Court on 7 June 2010, in the proceedings

Maribel Dominguez

v

Centre informatique du Centre Ouest Atlantique,

Préfet de la région Centre,

THE COURT (Grand Chamber),

composed of V. Skouris, President, A. Tizzano, J.N. Cunha Rodrigues, K. Lenaerts, and U. Lõhmus, Presidents of Chambers, A. Rosas, E. Levits (Rapporteur), A. Ó Caoimh, L. Bay Larsen, T. von Danwitz and A. Arabadjiev, Judges,

Advocate General: V. Trstenjak,

Registrar: R. Şereş, Administrator,

having regard to the written procedure and further to the hearing on 17 May 2011,

after considering the observations submitted on behalf of:

– Ms Dominguez, by H. Masse-Dessen and V. Lokiec, avocats,

– the Centre informatique du Centre Ouest Atlantique, by D. Célice, avocat,

– the French Government, by G. de Bergues, A. Czubinski and N. Rouam, acting as Agents,

– the Danish Government, by S. Juul Jørgensen, acting as Agent,

– the Netherlands Government, by C. Wissels and M. Noort, acting as Agents,

– the European Commission, by M. van Beek and M. Van Hoof, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 8 September 2011,

gives the following

Judgment

1 This reference for a preliminary ruling concerns the interpretation of Article 7 of Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003 concerning certain aspects of the organisation of working time (OJ 2003 L 299, p. 9).

2 The reference has been made in the proceedings between Ms Dominguez and her employer, the Centre informatique du Centre Ouest Atlantique ('the CICOA'), concerning Ms Dominguez's claim for entitlement to paid annual leave not taken in respect of the period between November 2005 and January 2007 due to absence from work granted after an accident and, in the alternative, for compensation.

Legal context

European Union legislation

3 Article 1 of Directive 2003/88 provides:

'Purpose and scope

1. This Directive lays down minimum safety and health requirements for the organisation of working time.

2. This Directive applies to:

(a) minimum periods of … annual leave …

...'

4 Article 7 of that directive reads as follows:

'Annual leave

1. Member States shall take the measures necessary to ensure that every worker is entitled to paid annual leave of at least four weeks in accordance with the conditions for entitlement to, and granting of, such leave laid down by national legislation and/or practice.

2. The minimum period of paid annual leave may not be replaced by an allowance in lieu, except where the employment relationship is terminated.'

5 Article 15 of that directive provides:

'More favourable provisions

This Directive shall not affect Member States' right to apply or introduce laws, regulations or administrative provisions more favourable to the protection of the safety and health of workers or to facilitate or permit the application of collective agreements or agreements concluded between the two sides of industry which are more favourable to the protection of the safety and health of workers.'

6 Article 17 of Directive 2003/88 provides that Member States may derogate from certain provisions of that directive. No derogation is allowed with regard to Article 7 of the directive.

National legislation

7 The first paragraph of Article L. 223-2 of the Code du travail (Labour Code) provides:

‘A worker who, during the reference year, has been employed by the same employer for a period equivalent to a minimum of one month of actual work shall be entitled to leave, the length of which shall be calculated on the basis of two and a half working days for each month worked, provided the total period of leave that may be requested does not exceed thirty working days.’

8 Article L. 223-4 of the Code du travail provides:

‘Periods equivalent to four weeks or twenty-four days of work shall be treated as equivalent to one month of actual work for the purpose of calculating the length of leave. Periods of paid leave, compensatory leave …, periods of maternity leave …, leave acquired by reason of reduced working time and periods of an uninterrupted duration not exceeding one year during which performance of the contract of employment is suspended owing to a work-related accident or occupational disease, shall be treated as periods of actual work ...’

9 The fourth paragraph of Article XIV of the model rules annexed to the national collective labour agreement for staff of social security bodies provides:

‘No annual leave entitlement is given in a particular year in respect of absences as a result of the following: illness or prolonged illness that has resulted in a break in work of twelve consecutive months or more, ... leave entitlement begins again on the date on which work is resumed, the length of leave being calculated in proportion to the time of actual work that has not yet given rise to the allocation of annual leave.’

The dispute in the main proceedings and the questions referred for a preliminary ruling

10 Ms Dominguez, who has been employed by the CICOA since 1987, is covered by the collective labour agreement for staff of social security bodies. Following an accident on the journey between her home and her place of work she was absent from work from 3 November 2005 until 7 January 2007.

11 Ms Dominguez brought a claim before the industrial relations court (juridiction prud’homale) and also the Cour d’appel, Limoges for 22.5 days’ paid leave in respect of that period and, in the alternative, a payment in lieu of leave.

12 Since those courts dismissed her claims, Ms Dominguez brought an appeal on a point of law. She argues that an accident on the journey to or from work is a work-related accident and is covered by the same arrangements as a work-related accident. Thus, under Article L. 223-4 of the Code du travail, the period of suspension of her contract of employment following the accident on the journey to work should be treated as being equivalent to actual work time for the purpose of calculating her paid leave.

13 In the light of the case-law of the Court of Justice relating to Article 7 of Directive 2003/88, the Cour de cassation (French Court of Cassation) was unsure whether the relevant French provisions were compatible with that article.

14 In those circumstances, the Cour de cassation decided to stay the proceedings and to refer the following questions to the Court for a preliminary ruling:

‘1. Must Article 7(1) of Directive 2003/88… be interpreted as precluding national provisions or practices which make entitlement to paid annual leave conditional on a minimum of ten days’ (or one month’s) actual work during the reference period?

2. If the answer to the first question is in the affirmative, does Article 7 of Directive 2003/88…, which imposes a specific obligation on an employer in so far as it creates entitlement to paid leave for a worker who is absent on health grounds for a period of one year or more, require a national court hearing proceedings between individuals to disregard a conflicting national provision which makes entitlement to paid annual leave in such a case conditional on at least ten days’ actual work during the reference year?

3. Since Article 7 of Directive 2003/88/EC does not distinguish between workers according to whether their absence from work during the reference period is due to a work-related accident, an occupational disease, an accident on the journey to or from work or a non-occupational disease, are workers entitled, under that directive, to paid leave of the same length whatever the reason for their absence on health grounds, or must that directive be interpreted as not precluding the length of paid leave differing according to the reason for the worker’s absence, if national law provides that in certain circumstances the length of paid annual leave may exceed the minimum of four weeks provided for by [Directive 2003/88]?’

The first question

15 By its first question, the national court asks, essentially, whether Article 7(1) of Directive 2003/88 must be interpreted as precluding national provisions or practices which make entitlement to paid annual leave conditional on a minimum period of ten days’ or one month’s actual work during the reference period.

16 In that regard it should be noted that, according to settled case-law, the entitlement of every worker to paid annual leave must be regarded as a particularly important principle of European Union social law from which there can be no derogations and whose implementation by the competent national authorities must be confined within the limits expressly laid down by Council Directive 93/104/EC of 23 November 1993 concerning certain aspects of the organisation of working time (OJ 1993 L 307, p. 18) itself, that directive being now codified by Directive 2003/88 (see Case C-173/99 *BECTU* [2001] ECR I-4881, paragraph 43; Joined Cases C-350/06 and C-520/06 *Schultz-Hoff and Others* [2009] ECR I-179, paragraph 22; and Case C-214/10 *KHS* [2011] ECR I-0000, paragraph 23).

17 Thus, Directive 93/104 must be interpreted as precluding Member States from unilaterally limiting the entitlement to paid annual leave conferred on all workers by applying a precondition for such entitlement which has the effect of preventing certain workers from benefiting from it (*BECTU*, paragraph 52).

18 Although Member States are free to lay down, in their domestic legislation, conditions for the exercise and implementation of the right to paid annual leave, they are not entitled to make the very existence of that right subject to any preconditions whatsoever (see *Schultz-Hoff and Others*, paragraph 46).

19 Thus, the requisite arrangements for implementation and application of the requirements of Directive 93/104, codified by Directive 2003/88, may display certain divergences as regards the conditions for

exercising the right to paid annual leave, but that directive does not allow Member States to exclude the very existence of a right expressly granted to all workers (*BECTU*, paragraph 55, and *Schultz-Hoff and Others*, paragraph 47).

20 Also, since Directive 2003/88 does not make any distinction between workers who are absent from work on sick leave during the reference period and those who have in fact worked in the course of that period (see *Schultz-Hoff and Others*, paragraph 40) it follows that, with regard to workers on sick leave which has been duly granted, the right to paid annual leave conferred by that directive on all workers cannot be made subject by a Member State to a condition that the worker has actually worked during the reference period laid down by that State (*Schultz-Hoff and Others*, paragraph 41).

21 It follows from the foregoing that Article 7(1) of Directive 2003/88 must be interpreted as precluding national provisions or practices which make entitlement to paid annual leave conditional on a minimum period of ten days' or one month's actual work during the reference period.

The second question

22 By its second question, the national court asks, essentially, whether Article 7 of Directive 2003/88 must be interpreted as meaning that in proceedings between individuals a national provision which makes entitlement to paid annual leave conditional on a minimum period of actual work during the reference period, which is contrary to Article 7, must be disregarded.

23 It should be stated at the outset that the question whether a national provision must be disapplied in as much as it conflicts with European Union law arises only if no compatible interpretation of that provision proves possible.

24 In that regard, the Court has consistently held that when national courts apply domestic law they are bound to interpret it, so far as possible, in the light of the wording and the purpose of the directive concerned in order to achieve the result sought by the directive and consequently comply with the third paragraph of Article 288 TFEU. This obligation to interpret national law in conformity with European Union law is inherent in the system of the Treaty on the Functioning of the European Union, since it permits national courts, for the matters within their jurisdiction, to ensure the full effectiveness of European Union law when they determine the disputes before them (see, inter alia, Joined Cases C-397/01 to C-403/01 *Pfeiffer and Others* [2004] ECR I-8835, paragraph 114; Joined Cases C-378/07 to C-380/07 *Angelidaki and Others* [2009] ECR I-3071, paragraphs 197 and 198; and Case C-555/07 *Kücükdeveci* [2010] ECR I-365, paragraph 48).

25 It is true that this principle of interpreting national law in conformity with European Union law has certain limitations. Thus the obligation on a national court to refer to the content of a directive when interpreting and applying the relevant rules of domestic law is limited by general principles of law and it cannot serve as the basis for an interpretation of national law contra legem (see Case C-268/06 *Impact* [2008] ECR I-2483, paragraph 100, and *Angelidaki and Others*, paragraph 199).

26 In the dispute in the main proceedings, the national court states that it has encountered such a limitation. According to that court, the first paragraph of Article L. 223-2 of the Code du travail, which makes entitlement to paid annual leave conditional on a minimum of one month's actual work during the reference period, is not amenable to an interpretation that is compatible with Article 7 of Directive 2003/88.

27 In that regard, it should be noted that the principle that national law must be interpreted in conformity

with European Union law also requires national courts to do whatever lies within their jurisdiction, taking the whole body of domestic law into consideration and applying the interpretative methods recognised by domestic law, with a view to ensuring that the directive in question is fully effective and achieving an outcome consistent with the objective pursued by it (see Case C-212/04 *Adeneler and Others* [2006] ECR I-6057, paragraph 111, and *Angelidaki and Others*, paragraph 200).

28 In the dispute in the main proceedings, Article L. 223-4 of the Code du travail, which provides an exemption from the requirement of actual work during the reference period in respect of certain periods of absence from work, is an integral part of the domestic law to be taken into consideration by the French courts.

29 If Article L. 223-4 of the Code du travail were to be interpreted by the national court as meaning that a period of absence due to an accident on the journey to or from work must be treated as being equivalent to a period of absence due to an accident at work in order to give full effect to Article 7 of Directive 2003/88, that court would not encounter the limitation, referred to in paragraph 26 above, as regards interpreting Article L. 223-2 of the Code du travail in accordance with European Union law.

30 In that regard, it should be pointed out that Article 7 of Directive 2003/88 does not make any distinction between workers who are absent on sick leave during the reference period and those who have actually worked in the course of that period (see paragraph 20 above). It follows that the right to paid annual leave of a worker who is absent from work on health grounds during the reference period cannot be made subject by a Member State to a condition concerning the obligation actually to have worked during that period. Thus, according to Article 7 of Directive 2003/88, any worker, whether he be on sick leave during the reference period as a result of an accident at his place of work or elsewhere, or as the result of sickness of whatever nature or origin, cannot have his entitlement to at least four weeks' paid annual leave affected.

31 It is clear from the foregoing that it is for the national court to determine, taking the whole body of domestic law into consideration, in particular Article L. 223-4 of the Code du travail, and applying the interpretative methods recognised by domestic law with a view to ensuring that Directive 2003/88 is fully effective and achieving an outcome consistent with the objective pursued by it, whether it can find an interpretation of that law that allows the absence of the worker due to an accident on the journey to or from work to be treated as being equivalent to one of the situations covered by that article of the Code du travail.

32 In the event that such an interpretation is not possible, it is necessary to consider whether Article 7(1) of Directive 2003/88 has a direct effect and, if so, whether Ms Dominguez may rely on that direct effect against the respondents in the main proceedings, in particular her employer, the CICOA, in view of their legal nature.

33 In that regard, it is clear from the settled case-law of the Court that, whenever the provisions of a directive appear, so far as their subject-matter is concerned, to be unconditional and sufficiently precise, they may be relied upon before the national courts by individuals against the State where the latter has failed to implement the directive in domestic law by the end of the period prescribed or where it has failed to implement the directive correctly (see, inter alia, *Pfeiffer and Others*, paragraph 103 and the case-law cited).

34 Article 7 of Directive 2003/88 fulfils those criteria as it imposes on Member States, in unequivocal terms, a precise obligation as to the result to be achieved that is not coupled with any condition regarding application of the rule laid down by it, which gives every worker entitlement to at least four

weeks' paid annual leave.

35 Even though Article 7 of Directive 2003/88 leaves the Member States a degree of latitude when they adopt the conditions for entitlement to, and granting of, the paid annual leave which it provides for, that does not alter the precise and unconditional nature of the obligation laid down in that article. It is appropriate to note in that regard that Article 7 of Directive 2003/88 is not one of the provisions of that directive from which Article 17 thereof permits derogation. It is therefore possible to determine the minimum protection which must be provided in any event by the Member States pursuant to that Article 7 (see, *mutatis mutandis*, *Pfeiffer and Others*, paragraph 105).

36 Since Article 7(1) of Directive 2003/88 fulfils the conditions required to produce a direct effect, it should also be noted that the CICOA, one of the two respondents in the main proceedings and Ms Dominguez's employer, is a body operating in the field of social security.

37 It is true that the Court has consistently held that a directive cannot of itself impose obligations on an individual and cannot therefore be relied on as such against an individual (see, inter alia, Case C-91/92 *Faccini Dori* [1994] ECR I-3325, paragraph 20; Case C-192/94 *El Corte Inglés* [1996] ECR I-1281, paragraph 15; *Pfeiffer and Others*, paragraph 108; and *Kücükdeveci*, paragraph 46).

38 It should also be recalled however that, where a person is able to rely on a directive not as against an individual but as against the State he may do so regardless of the capacity in which the latter is acting, whether as employer or as public authority. In either case it is necessary to prevent the State from taking advantage of its own failure to comply with European Union law (see, inter alia, Case 152/84 *Marshall* [1986] ECR 723, paragraph 49; Case C-188/89 *Foster and Others* [1990] ECR I-3313, paragraph 17; and Case C-343/98 *Collino and Chiappero* [2000] ECR I-6659, paragraph 22).

39 Thus the entities against which the provisions of a directive that are capable of having direct effect may be relied upon include a body, whatever its legal form, which has been made responsible, pursuant to a measure adopted by the State, for providing a public service under the control of the State and has for that purpose special powers beyond those which result from the normal rules applicable in relations between individuals (see, inter alia, *Foster and Others*, paragraph 20; *Collino and Chiappero*, paragraph 23; and Case C-356/05 *Farrell* [2007] ECR I-3067, paragraph 40).

40 It is therefore for the national court to determine whether Article 7(1) of Directive 2003/88 may be relied upon against the CICOA.

41 If that is the case, as Article 7 of Directive 2003/88 fulfils the conditions required to produce a direct effect, the consequence would be that the national court would have to disregard any conflicting national provision.

42 If that is not the case, it should be borne in mind that even a clear, precise and unconditional provision of a directive seeking to confer rights or impose obligations on individuals cannot of itself apply in proceedings exclusively between private parties (see *Pfeiffer and Others*, paragraph 109).

43 In such a situation, the party injured as a result of domestic law not being in conformity with European Union law can none the less rely on the judgment in Joined Cases C-6/90 and C-9/90 *Francovich and Others* [1991] ECR I-5357 in order to obtain, if appropriate, compensation for the loss sustained.

44 The answer to the second question is therefore that

– it is for the national court to determine, taking the whole body of domestic law into

consideration, in particular Article L. 223-4 of the Code du travail, and applying the interpretative methods recognised by domestic law, with a view to ensuring that Article 7 of Directive 2003/88 is fully effective and achieving an outcome consistent with the objective pursued by it, whether it can find an interpretation of that law that allows the absence of the worker due to an accident on the journey to or from work to be treated as being equivalent to one of the situations covered by that article of the Code du travail.

– if such an interpretation is not possible, it is for the national court to determine whether, in the light of the legal nature of the respondents in the main proceedings, the direct effect of Article 7(1) of Directive 2003/88 may be relied upon against them.

– if the national court is unable to achieve the objective laid down in Article 7 of Directive 2003/88, the party injured as a result of domestic law not being in conformity with European Union law can none the less rely on the judgment in *Francovich and Others* in order to obtain, if appropriate, compensation for the loss sustained.

The third question

45 By its third question, the national court asks, essentially, whether Article 7 of Directive 2003/88 must be interpreted as precluding a national provision which, depending on the reason for the worker's absence on sick leave, provides for a period of paid annual leave equal to or exceeding the minimum period of four weeks laid down in that directive.

46 In that regard, it should be noted, as was held in paragraph 30 above, that Article 7 of Directive 2003/88 does not make any distinction, on grounds of the reason for the worker's absence on sick leave, duly granted, and any worker, whether he be on sick leave following an accident at his place of work or elsewhere, or as the result of sickness of whatever nature or origin, is entitled to at least four weeks' paid annual leave.

47 However, as stated both by the Advocate General in point 178 of her Opinion and by the European Commission in its written observations, the finding made in the preceding paragraph does not mean that Directive 2003/88 precludes national provisions giving entitlement to more than four weeks' paid annual leave, granted under the conditions for entitlement to, and granting of, the right to paid annual leave laid down by that national law.

48 As appears expressly from Article 1(1) and (2)(a) and from Articles 7(1) and 15 of Directive 2003/88, the purpose of the directive is merely to lay down minimum safety and health requirements for the organisation of working time and it does not affect Member States' right to apply national provisions more favourable to the protection of workers.

49 Thus it is permissible for Member States to provide that entitlement to paid annual leave under national law may vary according to the reason for the worker's absence on health grounds, provided that the entitlement is always equal to or exceeds the minimum period of four weeks laid down in Article 7 of that directive.

50 It follows from the foregoing that Article 7(1) of Directive 2003/88 must be interpreted as not precluding a national provision which, depending on the reason for the worker's absence on sick leave, provides for a period of paid annual leave equal to or exceeding the minimum period of four weeks laid down in that directive.

Costs

51 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Grand Chamber) hereby rules:

1. **Article 7(1) of Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003 concerning certain aspects of the organisation of working time must be interpreted as precluding national provisions or practices which make entitlement to paid annual leave conditional on a minimum period of ten days' or one month's actual work during the reference period;**

2. **It is for the national court to determine, taking the whole body of domestic law into consideration, in particular Article L. 223-4 of the Code du travail, and applying the interpretative methods recognised by domestic law, with a view to ensuring that Article 7 of Directive 2003/88 is fully effective and achieving an outcome consistent with the objective pursued by it, whether it can find an interpretation of that law that allows the absence of the worker due to an accident on the journey to or from work to be treated as being equivalent to one of the situations covered by that article of the Code du travail.**

   If such an interpretation is not possible, it is for the national court to determine whether, in the light of the legal nature of the respondents in the main proceedings, the direct effect of Article 7(1) of Directive 2003/88 may be relied upon against them.

   If the national court is unable to achieve the objective laid down in Article 7 of Directive 2003/88, the party injured as a result of domestic law not being in conformity with European Union law can none the less rely on the judgment of 19 November 1991 in Joined Cases C-6/90 and C-9/90 *Francovich and Others* in order to obtain, if appropriate, compensation for the loss sustained.

3. **Article 7(1) of Directive 2003/88 must be interpreted as not precluding a national provision which, depending on the reason for the worker's absence on sick leave, provides for a period of paid annual leave equal to or exceeding the minimum period of four weeks laid down in that directive.**

[Signatures]

1* Language of the case: French.

JUDGMENT OF THE COURT (Fourth Chamber)

19 December 2012 (*)

(Failure of a Member State to fulfil obligations – Directive 75/442/EEC – Domestic waste waters discharged through septic tanks in the countryside – Judgment of the Court finding that a Member State has failed to fulfil obligations – Article 260(2) TFEU – Measures to ensure compliance with a judgment of the Court – Financial penalties – Penalty payment – Lump sum)

In Case C-374/11,

ACTION under Article 260(2) TFEU for failure to fulfil obligations, brought on 13 July 2011,

European Commission, represented by E. White, acting as Agent, with an address for service in Luxembourg,

applicant,

v

Ireland, represented by D. O'Hagan and E. Creedon, acting as Agents**,** assisted by A. Collins, SC, and M. Gray, BL, with an address for service in Luxembourg,

defendant,

THE COURT (Fourth Chamber),

composed of L. Bay Larsen, acting as President of the Fourth Chamber, J.-C. Bonichot (Rapporteur), C. Toader, A. Prechal and E. Jarašiūnas, Judges,

Advocate General: J. Kokott,

Registrar: T. Millett, Deputy Registrar,

having regard to the written procedure and further to the hearing on 4 October 2012,

having decided, after hearing the Advocate General, to proceed to judgment without an Opinion,

gives the following

Judgment

1 By its application, the European Commission requests the Court to:

– declare that, by failing to take the necessary measures to comply with the judgment of the Court of 29 October 2009 in Case C-188/08 *Commission* v *Ireland* concerning the failure of Ireland to fulfil its obligations under Council Directive 75/442/EEC of 15 July 1975 on waste (OJ 1975 L 194, p. 39), as amended by Council Directive 91/156/EEC of 18 March 1991 (OJ 1991

L 78, p. 32) (‘Directive 75/442’), Ireland has failed to fulfil its obligations under Article 260 TFEU;

– order Ireland to pay to the Commission a lump sum of EUR 4 771.20 multiplied by the number of days between the date of delivery of the judgment in Case C-188/08 *Commission* v *Ireland* and the date of the judgment in the present case (or the date of full compliance with the judgment in Case C-188/08 *Commission* v *Ireland*, if such compliance occurs while the present case is pending);

– order Ireland to pay to the Commission a daily penalty payment of EUR 26 173.44 from the date of judgment delivered in the present proceedings to the date of compliance by Ireland with the judgment in Case C-188/08 *Commission* v *Ireland*; and

– order Ireland to pay the costs.

Legal context

2 Article 4 of Directive 75/442 is worded as follows:

‘Member States shall take the necessary measures to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and in particular:

– without risk to water, air, soil and plants or animals;

– without causing a nuisance through noise or odours;

– without adversely affecting the countryside or places of special interest.

Member States shall also take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste.’

3 Article 8 of that directive provides:

‘Member States shall take the necessary measures to ensure that any holder of waste:

– has it handled by a private or public waste collector or by an undertaking which carries out the operations listed in Annex II A or II B, or

– recovers or disposes of it himself in accordance with the provisions of this Directive’.

4 Article 13 of Directive 75/442 states:

‘Establishments or undertakings which carry out the operations referred to in Articles 9 to 12 shall be subject to appropriate periodic inspections by the competent authorities’.

The judgment in Case C-188/08 *Commission* v *Ireland*

5 On 6 May 2008, the Commission, pursuant to Article 226 EC, brought an action against Ireland for failure to fulfil obligations by which it sought a declaration that that Member State had failed to fulfil its obligations under Directive 75/442 by failing to transpose, fully and correctly, into its domestic

legislation the requirements of Articles 4 and 8 of that directive, relating to the disposal of domestic waste waters in the countryside through septic tanks and other individual waste water treatment systems ('IWWTS').

6 In paragraph 1 of the operative part of the judgment in Case C-188/08 *Commission* v *Ireland*, the Court held as follows:

'… by failing to adopt, save in County Cavan, all the laws, regulations and administrative provisions necessary to comply with Articles 4 and 8 of [Directive 75/442] … as regards domestic waste waters disposed of in the countryside through [IWWTS], Ireland has failed to fulfil its obligations under that directive'.

The pre-litigation procedure

7 By letter of 23 November 2009, the Commission requested the Irish authorities to notify it of the measures taken to comply with the judgment in Case C-188/08 *Commission* v *Ireland*.

8 The Irish authorities replied by letter of 22 December 2009, proposing to the Commission a timetable for the adoption of the legislative and regulatory provisions envisaged and outlining their main features. That letter also announced, first, the creation of a working group to determine the appropriate performance standards and necessary changes in the planning requirements and building standards and, secondly, the publication by the Environmental Protection Agency (EPA) of a 'Code of Practice' on on-site waste-water treatment and disposal systems.

9 As it was not satisfied with that reply, the Commission, in a letter dated 25 November 2010, sent to Ireland a letter of formal notice calling on it to submit, within two months from the date of notification, its observations on the extent to which the judgment had been complied with.

10 On 3 February 2011, the Irish authorities replied to the letter of formal notice by informing the Commission of the progress of the legislative work. They stated that draft legislation amending the Water Services Act 2007 had been prepared and would be presented as soon as possible to the Government for approval.

11 In an additional reply received by the Commission on 10 May 2011, the Irish authorities stated that the draft legislative text had been approved by the Government.

12 As it was still not satisfied by the replies provided by the Irish authorities, the Commission, in accordance with Article 260(2) TFEU, brought the present action before the Court.

Procedure before the Court

13 In the course of the written procedure, the Irish authorities sent to the Commission the initial version of the 2011 draft legislation amending the 2007 Act (the Water Services (Amendment) Bill 2011). The Commission, basing itself on the provisions of the draft legislation, expressed the view, in its reply, that such measures still did not ensure the correct transposition of Articles 4 and 8 of Directive 75/442.

14 The Irish authorities informed the Court, in their rejoinder, that that draft legislation had been adopted and that the Water Services (Amendment) Act 2012 had entered into force.

The failure to fulfil obligations

Arguments of the parties

15 The Commission, examining the Water Services (Amendment) Bill 2011, considers that the effectiveness of the monitoring and inspection system provided for still depends on ministerial regulations which will be approved at a later date. It points out that the financing of the new inspection system seems to it to be uncertain, that there is no express obligation requiring the competent authorities to ensure that inspections are carried out, that the national inspection plan does not appear to be binding, that the system envisaged for the recruitment of inspectors does not guarantee that there will be a sufficient number of inspectors, and that the inspections are neither systematic nor sufficiently binding.

16 Ireland is of the view that it has taken the measures necessary to comply with the Court's judgment by adopting the Water Services (Amendment) Act 2012. That act provides for the establishment of a new monitoring and inspection system for septic tanks and other on-site systems for the treatment of waste water and drains associated with the discharge of domestic waste water. It also provides that the owners of such systems must ensure that they are registered with the competent water services authority.

17 Ireland claims that, in any event, the action should be dismissed, on the ground that the application was made too early. The period of 21 months between the delivery of the judgment in Case C-188/08 *Commission* v *Ireland* and the Commission's application is, it argues, insufficient in the light of the efforts required by the Irish authorities in order to comply with that judgment and does not take into account either the continuing and constructive dialogue that Ireland has been engaged in with the Commission after that judgment was delivered or the difficulties involved in the adoption of legislation in a particularly complex area.

Findings of the Court

18 According to Article 260(2) TFEU, if the Commission considers that the Member State concerned has not taken the necessary measures to comply with the Court's judgment, it may, after giving that Member State the opportunity to submit its observations, bring the case before the Court specifying the amount of the lump sum or penalty payment to be paid by the Member State concerned which it considers appropriate in the circumstances.

19 In that respect, the reference date for assessing whether there has been a failure to fulfil obligations under Article 260(1) TFEU is the date of expiry of the period prescribed in the reasoned opinion issued under that provision (see judgment of 11 December 2012 in Case C-610/10 *Commission* v *Spain* [2012] ECR I-0000, paragraph 67).

20 In the present case, it is common ground that, at the time when the period laid down in the reasoned opinion sent by the Commission to Ireland on 25 November 2010 expired, Ireland had not adopted all the measures necessary to ensure full compliance with the obligations resulting from the judgment in Case C-188/08 *Commission* v *Ireland*.

21 Furthermore, with regard to Ireland's argument that the action is premature, it must be pointed out that, even though Article 260(1) TFEU does not specify the period within which a judgment must be complied with, it follows from settled case-law that the importance of immediate and uniform application of European Union law means that the process of compliance must be initiated at once and

completed as soon as possible (see, to that effect, Case C-278/01 *Commission* v *Spain* [2003] ECR I-14141, paragraph 27 and the case-law cited).

22 In the present case, however, a period of approximately 21 months elapsed between the delivery of the judgment in Case C-188/08 *Commission* v *Ireland* and the lodging of the Commission's application. Even though the implementation of the judgment in Case C-188/08 *Commission* v *Ireland* involved complex operations, such a period cannot, in the circumstances of the present case, be considered to be insufficient.

23 In those circumstances, it must be held that, by failing to adopt all of the measures necessary to ensure compliance with the judgment in Case C-188/08 *Commission* v *Ireland*, Ireland has failed to fulfil its obligations under Article 260(1) TFEU.

The financial penalties

Arguments of the parties

24 The Commission, establishing that Ireland has still not complied with the judgment in Case C-188/08 *Commission* v *Ireland*, submits that that Member State should be ordered to pay, firstly, a lump sum of EUR 4 771.20, multiplied by the number of days between the date of delivery of that judgment and the date of the Court's judgment in the present case and, secondly, a daily penalty payment of EUR 26 173.44 from the date of the judgment in the present case to the date of full compliance by Ireland with the first judgment.

25 Referring to the guidelines contained in its Communication SEC (2005) 1658 of 13 December 2005 on the application of Article 228 EC (OJ 2007 C 126, p 15), as updated by Communication SEC (2010) 923/3 of 20 July 2010 entitled 'Application of Article 260 of the Treaty on the Functioning of the European Union. Up-dating of data used to calculate lump sum and penalty payments to be proposed by the Commission to the Court of Justice in infringement proceedings', the Commission proposes to apply penalties calculated on the basis of a seriousness factor of 8 out of 20, taking account of the importance of the European Union rules which were the subject of the infringement, that is to say, the provisions of a directive intended to protect human health and the environment, the large number of IWWTS concerned by the inadequacies of the national provisions with regard to the requirements of that directive, and the extent of the risk of pollution resulting therefrom. The Commission, furthermore, considers that account must be taken of Ireland's repeated engagement in infringing conduct which has given rise to the delivery by the Court of several judgments against that Member State for failure to fulfil its obligations in environmental matters.

26 In order to determine the duration of the infringement, the Commission submits that the amount of the lump sum must be calculated with regard to the period between the date of delivery of the judgment in Case C-188/08 *Commission* v *Ireland*, implementation of which is sought, and the date on which it decided to bring the present proceedings before the Court, that is to say, approximately 18 months, which corresponds, under the terms of its Communication of 13 December 2005, to a duration factor of 1.8.

27 Finally, in order to determine the factor 'n', which corresponds to the financial capacity of individual Member States, the Commission relies on its Communication of 20 July 2010, which fixes that factor, for Ireland, at 2.84. The Commission adds that, while it is true that, in a revision dated 1 September 2011 (SEC (2011) 1024 final), the factor 'n' for Ireland was reduced to 2.71, it is not appropriate to

take account of that factor as the present action was brought prior to that revision.

28 Ireland, for its part, contends that, since the adoption of the Water Services (Amendment) Act 2012, there is no longer any need to order it to pay a lump sum or penalty payment. On the assumption, however, that the Court intends to impose such financial penalties on it, Ireland argues that the lump sum should not be in excess of EUR 630 per day and that the penalty payment should not exceed EUR 5 000 per day.

29 In respect of the criterion of seriousness, Ireland considers that a factor of 3 out of 20 would be more appropriate, in view of the difficulties encountered by the Irish legislature, the existence in Irish legislation of provisions which could not have been taken into account by the Court in 2009, as being subsequent to the date fixed in the reasoned opinion, the establishment by the Environmental Protection Agency of stricter criteria regarding drinking water and, finally, the proven and sincere cooperation of the Irish authorities.

30 Ireland considers that the Court should take into account, in assessing the duration of the infringement, the commitment of the Irish authorities to on-going constructive dialogue with the Commission on the content of the draft legislation, which falls into a complex legislative framework requiring time to enact the legislation necessary to ensure compliance with the judgment in Case C-188/08 *Commission* v *Ireland*.

31 Finally, the Irish authorities take issue with the method employed by the Commission to determine Ireland's capacity-to-pay factor, since this does not take into account the fall in Ireland's gross domestic product between 2008 and 2010 and the deterioration of Ireland's public finances. The reference to a gross domestic product dating back to three years prior to the commencement of the proceedings is, it is submitted, inadequate. The factor 'n' should be reduced to 1. In any event, if the Court should decide to apply the factor 'n' as set out in the Commission's Communications, Ireland argues that it would be appropriate to use the factor indicated in the most recent Communication.

Findings of the Court

32 Having recognised that Ireland has failed to comply with the judgment in Case C-188/08 *Commission* v *Ireland*, compliance with which the Commission is seeking to ensure, the Court may impose on that Member State, pursuant to the second subparagraph of Article 260(2) TFEU, a lump sum or a penalty payment.

The penalty payment

– The principle of the imposition of a penalty payment

33 According to settled case-law, the imposition of a penalty payment is, in principle, justified only in so far as the failure to comply with an earlier judgment of the Court continues up to the time of the Court's examination of the facts (Case C-496/09 *Commission* v *Italy* [2011] ECR I-0000, paragraph 42, and Case C-610/10 *Commission* v *Spain*, paragraph 96).

34 It must be held in the present case that, at the time of that examination, the measures necessary for the implementation of the judgment in Case C-188/08 *Commission* v *Ireland* had not yet been adopted in full. In particular, it is common ground that the Water Services (Amendment) Act 2012 requires implementation of texts not all of which have yet been adopted and that the national inspection plan for IWWTS has still to be developed. It also does not appear that a definitive deadline for the registration of IWWTS has been set.

35 In those circumstances, the Court takes the view that the imposition of a penalty payment on Ireland constitutes an appropriate financial means to ensure full compliance with the judgment in Case C-188/08 *Commission* v *Ireland* (see, to that effect, *Commission* v *Italy*, paragraph 45, and Case C-610/10 *Commission* v *Spain*, paragraph 114).

– The amount of the penalty payment

36 It should be recalled that, in exercising its discretion in the matter, it is for the Court to set the penalty payment so that it is both appropriate to the circumstances and proportionate to the infringement established and the ability of the Member State concerned to pay (see *Commission* v *Italy*, paragraph 56 and the case-law cited).

37 In the assessment carried out by the Court, the criteria which must be taken into account in order to ensure that a penalty payment has coercive force with a view to the uniform and effective application of European Union law are, in principle, the duration of the infringement, its degree of seriousness and the ability of the Member State concerned to pay. For the purpose of applying those criteria, the Court is required to have regard in particular to the effects of non-compliance on the public and private interests at issue and to the urgency of compliance by the Member State concerned with its obligations (see *Commission* v *Italy*, paragraph 57).

38 In the present case, the failure to fulfil obligations identified in the judgment in Case C-188/08 *Commission* v *Ireland* concerns the incomplete transposition of Directive 75/442, Article 2 of which provided for a transposition period expiring no later than 1 April 1993. Since, more than 19 years after that date, Ireland has still not complied with all of its obligations under that directive – the principal objectives of which are the protection of human health and of the environment – the Court cannot but confirm the particularly lengthy character of an infringement which, in the light of such objectives, is also a matter of indisputable gravity.

39 While Ireland claims that the delay in its compliance with the judgment in Case C-188/08 *Commission* v *Ireland* was attributable to internal difficulties connected with the complexity of the implementation of Directive 75/442, it must be pointed out that a Member State cannot plead provisions, practices or situations prevailing in its domestic legal order to justify the failure to observe obligations arising under European Union law (see Case C-407/09 *Commission* v *Greece* [2011] ECR I-0000, paragraph 36).

40 Account must, however, be taken of the adoption of the Water Services (Amendment) Act 2012 and of significant measures such as, in particular, those designed to establish a national register of IWWTS and to ensure the training of inspectors of those systems, which demonstrate the efforts made by the Irish authorities since the delivery of the judgment in Case C-188/08 *Commission* v *Ireland* with a view to full compliance therewith.

41 In addition, Ireland has committed itself to implementing the final steps necessary for the full implementation of that judgment in close collaboration with the Commission. Ireland also states, inter alia, that the recruitment of the inspectors is underway and that the national inspection plan should be finalised by 31 December 2012.

42 In so doing, Ireland does not dispute that it has yet to finalise the measures necessary to ensure compliance with the judgment in Case C-188/08 *Commission* v *Ireland* establishing a failure to fulfil the requirements arising from Articles 4 and 8 of Directive 75/442. It is common ground in this regard that the transposition of that directive by the Water Services (Amendment) Act 2012 can be regarded

as effective only when the measures referred to at paragraph 34 of the present judgment are adopted.

43 Having regard to all of the circumstances of the present case, the Court considers that it is appropriate to impose a daily penalty payment of EUR 12 000 to ensure implementation of the judgment in Case C-188/08 *Commission* v *Ireland*, that sum taking into account Ireland's capacity to pay as it stands at the date of the Court's examination of the facts (see, to that effect, Case C-610/10 *Commission* v *Spain*, paragraph 131).

44 In the present case, the data provided by Ireland, which have not been substantively disputed by the Commission, show that that Member State's capacity to pay was reduced in the context of economic crisis (see also, to that effect, judgment of 19 December 2012 in Case C-279/11 *Commission* v *Ireland* [2012] ECR I-0000, paragraph 79).

45 In those circumstances, Ireland must be ordered to pay to the Commission, into the 'European Union own resources' account, a penalty payment of EUR 12 000 for each day of delay in adopting the measures necessary to ensure compliance with the judgment in Case C-188/08 *Commission* v *Ireland* from the date on which judgment is delivered in the present case until the date of full compliance with the judgment in Case C-188/08 *Commission* v *Ireland*.

The lump sum payment

– The principle of the imposition of a lump sum payment

46 As a preliminary point, it must be pointed out that, in the light of the objectives of the procedure laid down in Article 260(2) TFEU, the Court is empowered, in the exercise of the discretion conferred on it by that article, to impose a penalty payment and a lump sum payment cumulatively (see, to that effect, Case C-304/02 *Commission* v *France* [2005] ECR I-6263, paragraph 83, and Case C-610/10 *Commission* v *Spain*, paragraph 140).

47 The imposition of a lump sum payment must, in each individual case, depend on all the relevant factors relating both to the characteristics of the infringement established and to the conduct of the Member State involved in the procedure initiated under Article 260 TFEU. In that respect, that provision confers a wide discretion on the Court in deciding whether or not to impose such a penalty (Case C-610/10 *Commission* v *Spain*, paragraph 141).

48 With regard to the present case, the Court takes the view that all the legal and factual circumstances pertaining to the infringement established indicate that effective prevention of future repetition of similar infringements of European Union law requires the adoption of a deterrent measure, such as the imposition of a lump sum payment (see, to that effect, Case C-369/07 *Commission* v *Greece* [2009] ECR I-5703, paragraph 145, and Case C-610/10 *Commission* v *Spain*, paragraph 142).

49 Indeed, other than the failure to comply with the judgment in Case C-188/08 *Commission* v *Ireland*, which has given rise to the present proceedings, a finding of a failure on the part of Ireland to fulfil its obligations under European Union law as regards water quality was made, as the Commission points out, in the judgments in Case C-316/00 *Commission* v *Ireland* [2002] ECR I-10527, Case C-396/01 *Commission* v *Ireland* [2004] ECR I-2315 and Case C-282/02 *Commission* v *Ireland* [2005] ECR I-4653. Such a situation reflects the persistent avoidance by that Member State of its European Union obligations in that area.

– The amount of the lump sum payment

50 If the Court decides to order a lump sum payment, it must, in the exercise of its discretion, set that payment in such a way that it is, first, appropriate to the circumstances and, secondly, proportionate both to the infringement that has been established and to the ability of the Member State concerned to pay (*Commission* v *Greece*, paragraph 146).

51 The relevant factors to be taken into account in that regard include, in particular, factors such as how long the breach of obligations has persisted since the judgment which initially established it was delivered and the public and private interests involved (Case C-121/07 *Commission* v *France* [2008] ECR I-9159, paragraph 64 and the case-law cited).

52 In the present case, in the light of all of the foregoing and, in particular, of the considerations set out in paragraphs 38 to 45 of the present judgment, proper account of the circumstances of the present case will be taken by setting the amount of the lump sum which Ireland will have to pay at EUR 2 000 000.

53 It is therefore appropriate to order Ireland to pay to the Commission, into the account 'European Union own resources', a lump sum of EUR 2 000 000.

Costs

54 Under Article 138(1) of the Rules of Procedure, the unsuccessful party is to be ordered to pay the costs if they have been applied for in the successful party's pleadings. Since the Commission has applied for costs and Ireland's failure to fulfil its obligations has been established, Ireland must be ordered to pay the costs.

On those grounds, the Court (Fourth Chamber) hereby:

1. **Declares that, by failing to adopt all of the measures necessary to ensure compliance with the judgment of 29 October 2009 in Case C-188/08 *Commission* v *Ireland* establishing that Ireland has failed to fulfil its obligations under Articles 4 and 8 of Council Directive 75/442/EEC of 15 July 1975 on waste, as amended by Council Directive 91/156/EEC of 18 March 1991, Ireland has failed to fulfil its obligations under Article 260(1) TFEU;**

2. **Orders Ireland to pay to the European Commission, into the 'European Union own resources' account, a penalty payment of EUR 12 000 for each day of delay in adopting the measures necessary to ensure compliance with the judgment in Case C-188/08 *Commission* v *Ireland*, with effect from the date on which judgment is delivered in the present case until the date of full compliance with the judgment in Case C-188/08 *Commission* v *Ireland*;**

3. **Orders Ireland to pay to the European Commission, into the 'European Union own resources' account, the lump sum of EUR 2 000 000;**

4. **Orders Ireland to pay the costs.**

[Signatures]

* Language of the case: English.

JUDGMENT OF THE COURT (Fourth Chamber)

31 January 2013 (*)

(Request for a preliminary ruling – Article 267 TFEU – Concept of 'national court' – Lack of jurisdiction of the Court)

In Case C-394/11,

REQUEST for a preliminary ruling under Article 267 TFEU from the Komisia za zashtita ot diskriminatsia (Bulgaria), made by decision of 19 July 2011, received at the Court on 25 July 2011, in the proceedings

Valeri Hariev Belov

v

CHEZ Elektro Balgaria AD,

Lidia Georgieva Dimitrova,

Roselina Dimitrova Kostova,

Kremena Stoyanova Stoyanova,

CHEZ Razpredelenie Balgaria AD,

Ivan Kovarzhchik,

Atanas Antonov Dandarov,

Irzhi Postolka,

Vladimir Marek,

Darzhavna Komisia po energiyno i vodno regulirane,

THE COURT (Fourth Chamber),

composed of L. Bay Larsen, acting for the President of the Fourth Chamber, J.-C. Bonichot, C. Toader, A. Prechal (Rapporteur) and E. Jarašiūnas, Judges,

Advocate General: J. Kokott,

Registrar: M. Aleksejev, Administrator,

having regard to the written procedure and further to the hearing on 11 July 2012,

after considering the observations submitted on behalf of:

– Mr Belov, by G. Chernicherska, Адвокат,

– CHEZ Elektro Balgaria AD and CHEZ Razpredelenie Balgaria AD, by A. Ganev and V. Bozhilov, Адвокати,

– the Bulgarian Government, by T. Ivanov and D. Drambozova, acting as Agents,

– the European Commission, by J. Enegren and D. Roussanov, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 20 September 2012,

gives the following

Judgment

1 This request for a preliminary ruling concerns the interpretation of Articles 2(2) and (3), 3(1)(h) and 8(1) of Council Directive 2000/43/EC of 29 June 2000 implementing the principle of equal treatment between persons irrespective of racial or ethnic origin (OJ 2000 L 180, p. 22), Article 3(5) of Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC (OJ 2003 L 176, p. 37), recital 29 in the preamble to and Articles 1 and 13(1) of Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC (OJ 2006 L 114, p. 64), Article 3(7) of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (OJ 2009 L 211, p. 55), and Article 38 of the Charter of Fundamental Rights of the European Union.

2 The request has been made in proceedings seeking to establish whether the measure, consisting in placing meters to measure electricity consumption at a height of seven metres on posts situated outside houses connected to the electricity network in two areas of the City of Montana (Bulgaria) mainly inhabited by members of the Roma community, constitutes discrimination based on ethnic origin and, if so, to order the cessation of that discrimination and the payment of fines by the persons responsible.

Legal context

European Union law

3 Article 2(2) and (3) of Directive 2000/43 provides:

‘2. For the purposes of paragraph 1:

(a) direct discrimination shall be taken to occur where one person is treated less favourably than another is, has been or would be treated in a comparable situation on grounds of racial or ethnic origin;

(b) indirect discrimination shall be taken to occur where an apparently neutral provision, criterion or practice would put persons of a racial or ethnic origin at a particular disadvantage compared with other persons, unless that provision, criterion or practice is objectively justified by a legitimate aim and the means of achieving that aim are appropriate and necessary.

3. Harassment shall be deemed to be discrimination within the meaning of paragraph 1, when an unwanted conduct related to racial or ethnic origin takes place with the purpose or effect of violating the dignity of a person and of creating an intimidating, hostile, degrading, humiliating or offensive environment. In this context, the concept of harassment may be defined in accordance with the national laws and practice of the Member States.'

4 Article 3(1)(h) of Directive 2000/43 states:

'Within the limits of the powers conferred upon the Community, this Directive shall apply to all persons, as regards both the public and private sectors, including public bodies, in relation to:

…

(h) access to and supply of goods and services which are available to the public, including housing.'

5 Article 8(1) of that directive provides:

'Member States shall take such measures as are necessary, in accordance with their national judicial systems, to ensure that, when persons who consider themselves wronged because the principle of equal treatment has not been applied to them establish, before a court or other competent authority, facts from which it may be presumed that there has been direct or indirect discrimination, it shall be for the respondent to prove that there has been no breach of the principle of equal treatment.'

6 Article 13 of Directive 2000/43 states:

'1. Member States shall designate a body or bodies for the promotion of equal treatment of all persons without discrimination on the grounds of racial or ethnic origin. These bodies may form part of agencies charged at national level with the defence of human rights or the safeguard of individuals' rights.

2. Member States shall ensure that the competences of these bodies include:

– without prejudice to the right of victims and of associations, organisations or other legal entities referred to in Article 7(2), providing independent assistance to victims of discrimination in pursuing their complaints about discrimination,

– conducting independent surveys concerning discrimination,

– publishing independent reports and making recommendations on any issue relating to such discrimination.'

Bulgarian law

7 Under Article 4 of the Law on protection against discrimination (Zakon za zatschtita ot diskriminatsia, 'the ZZD'):

'1. All direct or indirect discrimination on grounds of … ethnicity is prohibited …

2. Direct discrimination is any treatment of a person based on the characteristics mentioned in subparagraph 1 which is less favourable as compared with the manner in which another person in comparable and similar conditions is, has been or would be treated.

3. Indirect discrimination consists in placing a person, on the basis of the characteristics mentioned in subparagraph 1, in a less favourable position as compared with other persons by way of a measure, criterion or an ostensibly neutral practice, unless that measure, criterion or practice is justified taking account of a legitimate objective and that the means used to achieve are appropriate and necessary.'

8 Article 9 of the ZZD provides that 'in anti-discrimination proceedings, where a party claims that he is the victim of discrimination and establishes the facts from which it may be concluded that there has been discrimination, the defendant must show that there has been no infringement of the right to equal treatment'.

9 Article 37 of the ZZD states that 'it is not permitted to refuse to provide goods or services, to provide goods or services of inferior quality or on less favourable conditions on the basis of the characteristics referred to in Article 4(1).'

10 Paragraph 1 of 'Supplementary provisions' of the ZZD defines 'unfavourable treatment' as being 'any act or omission which adversely affects, directly or indirectly, rights or legitimate interests.'

11 Additionally, the ZZD contains a number of provisions relating to the Komisia za zashtita ot diskriminatsia (Commission for Protection against Discrimination 'the KZD'), for the purpose, inter alia, of setting out the composition, the duties and mode of functioning of that body.

12 In that regard, Article 47 of the ZZD states:

'The [KZD] shall:

1. record infringements of this Law or other laws on equal treatment and shall determine the person responsible for the infringement and the person concerned;

2. order the prevention and cessation of the infringement and the re-establishment of the initial situation;

3. apply the sanctions provided for and adopt coercive administrative measures;

4. give binding instructions concerning compliance with this Law or with other laws on equal treatment;

5. bring actions against administrative acts adopted contrary to this Law or other laws on equal treatment; bring legal proceedings and intervene as an interested party in cases brought under this Law or other laws on equal treatment;

6. formulate proposals and recommendations to State and local authority bodies for the prevention of discriminatory practices and for the annulment of their acts adopted contrary to this Law or other laws on equal treatment;

7. keep a public record of its decisions in force and its binding instructions;

8. give advice as to whether draft legislative acts are consistent with the legislation on the prevention of discrimination and recommend the adoption, repeal, amendment or supplementation of legislative acts;

9. provide independent assistance to victims of discrimination when they bring actions;

10. carry out independent studies on discrimination;

11. publish independent reports and make recommendations on any questions relating to discrimination;

12. exercise any other powers laid down in the legislation governing its organisation and its activity.'

13 Article 48 of the ZZD provides:

'(1) The [KZD] shall examine and decide the cases brought before it in formations determined by its President.

(2) The President of the [KZD] shall determine the permanent formation which specialises in discrimination:

1. on grounds of ethnicity or race;

2. on grounds of sex;

3. based on other characteristics referred to in Article 4(1).

…'

14 According to Article 50 of the ZZD:

'Proceedings before the [KZD] are brought:

1. on application of the persons concerned;

2. on the initiative of the [KZD];

3. by complaints from natural and legal persons or State and local authority bodies.'

15 Article 54 of the ZZD states:

'Once proceedings have been brought, the President of the [KZD] shall allocate the case to a formation, which shall appoint a rapporteur from among its members.'

16 Article 55 of the ZZD provides:

'1. The rapporteur shall open an investigation, during which he shall gather all the written evidence necessary to elucidate the facts of the case, using the services of its employees and external experts.

2. All persons, State and local authority bodies must cooperate with the [KZD] during the investigation and are required to provide the information and documents requested and to give any necessary clarifications.'

17 Article 65 of the ZZD provides:

'In giving its decision, the formation shall:

1. determine the infringement committed;

2. determine the person responsible for the infringement and the person concerned;

3. determine the type and magnitude of the sanction;

4. order coercive administrative measures;

5. find that there has been no infringement of the law and dismiss the action.'

18 Under Article 68(1) of the ZZD:

'The decisions of the [KZD] may be subject to an appeal, in accordance with the Administrative Procedure Code, within 14 days from their notification to the persons concerned.'

The dispute in the main proceedings and the questions referred for a preliminary ruling

19 In 1998 and 1999, the State electricity distribution companies placed meters to measure electricity consumption at a height of seven metres above the ground on posts situated on the outside of houses connected to the electricity network in a certain number of urban districts in Bulgaria which were known to be inhabited primarily by members of the Roma community.

20 Such a measure was adopted, in particular, in the Ogosta and Kosharnik districts in the City of Montana, it being common ground that they are still inhabited primarily by people belonging to the Roma community ('the measure at issue in the main proceedings').

21 Meanwhile, the supply and distribution of electricity in those two districts was taken over, following the privatisation of the energy sector, in particular by CHEZ Elektro Balgaria AD ('CEB'), the company supplying electricity, and CHEZ Razpredelenie Balgaria AD ('CRB'), a company which owns the electricity distribution networks.

22 Article 27 of the general conditions for contracts for the use of CRB's electricity distribution networks ('CRB's general conditions') states, in subparagraph 1 thereof, that 'commercial measuring instruments, including tariff management apparatus are made available so that the consumer may check his consumption'. However, subparagraph 2 thereof provides that '[if], to protect the life and health of citizens and property, the quality of the electricity, the continuity of the supply and the safety and reliability of the electricity supply system, commercial measuring instruments are installed in places to which access is difficult, the electricity distribution company is required to ensure at its own cost the possibility to make a visual inspection within three days of a written request from a consumer'.

23 Mr Belov, who describes himself as Roma, lives in the Ogosta district. As, both in his own opinion and in that of other persons of Roma origin who consume electricity in that district and in the Kosharnik district, the measure at issue in the main proceedings constitutes discrimination on grounds of ethnicity prohibited by Article 37 of the ZZD, Mr Belov made a complaint to the KZD, to which a petition signed by numerous other inhabitants of those districts was joined, which asked the KZD to order that CEB abolish that measure and impose sanctions, as laid down in the ZZD.

24 The KZD takes the view that the action brought by Mr Belov may be regarded both as an application and a complaint within the meaning of Article 50(1) and (3) respectively of the ZZD. As an inhabitant of the Ogosta district concerned by the measure at issue in the main proceedings, he acts on his own behalf and as the applicant in the proceedings and, in so far as he acts on behalf of other inhabitants of the same district and those in the Kosharnik district, he has the status of complainant.

25 As a result, the KZD brought proceedings against CRB, in its capacity of the owner of the electricity meters and the Darzhavna Komisia po energiyno i vodno regulirane (State Energy and Water Regulation Commission) as the authority which approved CRB's general conditions. The same is true for the various natural persons who, in their capacity as legal representatives of CEB and CRB, may be liable to pay fines if the alleged discrimination is established.

26 Before the KZD, CRB submits, first of all, that the measure at issue in the main proceedings cannot be regarded as discrimination if, in particular, it applies indistinctly to all the inhabitants of the districts concerned and that no law provides for the right or legitimate interest of the user to consult the reading on his meter.

27 Next, CRB claims that the applicant in the main proceedings has not produced evidence of the facts which would lead to the conclusion that there had been such discrimination, as required by Article 9 of the ZZD.

28 Finally, CRB contends that the introduction of the measure at issue in the main proceedings has no relationship to the ethnicity of the consumers in the two districts concerned. Moreover, it is justified by the purpose of avoiding damage to the infrastructure and illegal extraction of electricity which might endanger, in particular, the life and health of citizens, safety, the ownership and continuity of the electricity supply, and the extra costs which might result for other consumers.

29 As regards Article 27(2) of CRB's general conditions, the KZD points out that, if, as provided by that provisions, a consumer makes an application for a visual inspection of the meter reading, CRB is required to make available, within three days, a special platform allowing access to the meters. However, in such a case, the consumer cannot take a reading himself as this must be communicated to him by the persons authorised to use the platform. Furthermore, that measure has never been relied on in practice.

30 The possibility, provided for in Article 17(6) of the general conditions, to install an inspection meter at the consumer's residence involves the payment of a rental charge and, even in that case, the main meter is still positioned outside the house at a height of seven metres.

31 The KZD takes the view that the measure at issue in the main proceedings constitutes indirect discrimination on grounds of ethnicity, within the meaning of Articles 4(3) and 37 of the ZZD.

32 While noting that the provisions of the ZZD have been adopted, inter alia, to transpose Directive 2000/43, the KZD takes the view that an interpretation of European Union law is necessary in order to give its decision.

33 In that connection, it states, in particular, that Article 4(2) and (3) of the ZZD, read together with Point 1(7) of the Supplementary Provisions of the ZZD, as interpreted by the Varhoven administrativen sad (Supreme Administrative Court) (Bulgaria), requires, in order to establish the existence of discrimination, that a right or legitimate interest protected by law has been adversely affected. That is not the case as regards the right to access an electricity meter in order to read it. The KZD wonders whether such an interpretation complies with the provisions of Article 2(2)(a) and (b) of Directive 2000/43.

34 Furthermore, the KZD observes that, although Article 8(1) of Directive 2000/43 was transposed almost literally by Article 9 of the ZZD, the Bulgarian-language version of Article 8(1) differs from other language versions of that provision. The Bulgarian-language version provides that the victim must

establish the facts from which it may be ‘concluded’ that there has been discrimination, whereas the other language versions thereof refer to facts from which the existence of such discrimination may be ‘presumed’. The Varhoven administrativen sad also applies Article 9 of the ZZD as a full and complete traditional general rule of evidence, taking the view, in particular, that, having regard to the fact that the Ogosta and Kosharnik districts are not inhabited solely by Roma and the fact that the reasons for the measure at issue in the main proceedings are not based on the ethnicity of the persons concerned by that measure, the existence of discrimination has not been established.

35 Finally, the Varhoven administrativen sad held that, in any event, measures such as that at issue in the main proceedings are necessary and justified having regard to the legitimate objectives pursued. The KZD expresses doubts as to whether such an analysis is well founded.

36 It is in those circumstances that the KZD decided to stay the proceedings and to refer the following questions to the Court for a preliminary ruling:

‘1 Does the case to be considered fall within the scope of Council Directive 2000/43 … of equal treatment between persons irrespective of racial or ethnic origin (here with respect to Article 3(1)(h))?

2 What is meant by “treated less favourably” within the meaning of Article 2(2)(a) of Directive 2000/43 and by “put persons of a racial or ethnic origin at a particular disadvantage” within the meaning of Article 2(2)(b) of Directive 2000/43?

(a) For less favourable treatment to qualify as direct discrimination, is it absolutely essential for the treatment to be more unfavourable and for it to infringe, directly or indirectly, rights or interests explicitly defined in law, or is it to be understood as any form of behaviour (relationship) in the wider sense of the word which is less advantageous than behaviour in a similar situation?

(b) For the fact of being put in a particular unfavourable situation to qualify as indirect discrimination, is it also necessary for it to infringe, directly or indirectly, rights or interests explicitly defined in law, or is it to be understood in the wider sense as any form of being placed in a particular unfavourable/disadvantageous situation?

3 Depending on the answer to the second question, if, for direct or indirect discrimination within the meaning of Article 2(2)(a) and (b) of Directive 2000/43 to be deemed to have occurred, it is necessary for the less favourable treatment or the fact of being put in a particular unfavourable situation to infringe, directly or indirectly, a right or interest defined in law,

(a) do the provisions of Article 38 of the Charter of Fundamental Rights of the European Union, [Directive 2006/32] (Recital 29, Article 1 and Article 13(1)), [Directive 2003/54] (Article 3(5)) and [Directive 2009/72] (Article 3(7)) define, to the benefit of the final consumer of electricity, a right or interest entitling him to check meter readings regularly and capable of being relied on before the national courts in proceedings such as the main proceedings,

and

(b) is national legislation and/or administrative practice approved by the State energy regulatory authority granting a distribution undertaking the freedom to install electricity meters in places to which it is difficult or impossible to gain access, preventing consumers

from checking and monitoring meter readings regularly, compatible with those provisions?

4 Depending on the answer to the second question: If, for direct or indirect discrimination to be deemed to have occurred, it is not absolutely necessary for a right or interest defined in law to have been directly or indirectly infringed,

(a) is, pursuant to Article 2(2)(a) and (b) of Directive 2000/43, national legislation or case-law, as at issue in the main proceedings, admissible if it requires, for discrimination to be deemed to have occurred, that the more unfavourable treatment and the fact of being put in a more unfavourable position infringe, directly or indirectly, rights or interests defined in law;

(b) if they are not admissible, is the national court then obliged not to apply them in the case before it and to refer to the definitions given in [that] directive?

5 Is Article 8(1) of Directive 2000/43 to be interpreted

(a) as meaning that it requires the victim to establish facts which impose an unambiguous, incontestable and certain conclusion or inference that direct or indirect discrimination has occurred, or is it sufficient for the facts to justify only an assumption/presumption of such discrimination?

(b) Do the facts that only in the two parts of the city known as Roma districts are electricity meters attached to electricity poles in the streets at a height at which consumers cannot read them, with known exceptions in some parts of those two urban districts, and in all other districts of the city the electricity meters are placed at a different height (up to 1.7 m) at which they can be read, usually in the consumer's home, on the outside of the building or on surrounding fences, lead to a shift in the burden of proof to the defendant?

(c) Do the facts that not only Roma but also people of a different ethnic origin live in the two parts of the city known as Roma districts and/or accordingly, not all the inhabitants of those two districts actually regard themselves as Roma, and/or the reasons for placing the electricity meters in those two urban districts at a height of 7 m are described by the distribution undertaking as being generally known, preclude a shift in the burden of proof to the defendant?

6 Depending on the answer to Question 5:

(a) If Article 8(1) of Directive 2000/43 is to be interpreted as meaning that an assumption/presumption of the occurrence of discrimination is necessary and if the aforementioned facts lead to a shift in the burden of proof to the defendant, what form of discrimination can be presumed from those facts – direct or indirect discrimination and/or harassment?

(b) Do the provisions of Directive 2000/43 enable direct discrimination and/or harassment to be justified by the pursuit of a legal objective by necessary and suitable means?

(c) In view of the legal objectives which the distribution undertaking emphasises it is pursuing, can the measure taken in the two urban districts be justified in a situation in which

– the measure is taken because of the increasing incidence of unpaid bills in the two

urban districts and the frequent offences committed by consumers which impair or threaten the safety, quality and continuous and secure operation of the electrical installations

and

– the measure is taken across the board, irrespective of whether the individual consumer pays his bills for the distribution and supply of electricity and whether the individual consumer has been found to have committed any offence (manipulation of meter readings, illegal connection and/or extraction and/or consumption of electricity without payment, or any other interference with the network which impairs or threatens its safe, high-quality, continuous and secure operation);

– provision is made in legislation and the General Conditions of the Contract on Distribution ("Distribution Contract") for liability for any similar offence in civil, administrative and criminal law;

– the clause contained in Article 27(2) of the General Conditions of the Distribution Contract – whereby the distribution undertaking gives an assurance that, if explicitly requested by a consumer in writing, it will enable him to make a visual check of the meter readings – does not in fact enable the consumer to check the readings personally and regularly;

– it is possible for an inspection meter to be installed in the consumer's home at his explicit written request, although a fee is payable;

– the measure is a distinctive and visible reference to the dishonesty of the consumer in one or other form in view of what the distribution undertaking refers to as the generally known reasons for the measure being taken;

– other technical methods and means can be used to protect electricity meters against interference;

– the legal representative of the distribution undertaking claims that a similar measure taken in a Roma district of another city was in fact unable to prevent interference;

– it is not assumed that an electrical installation in one of these urban districts, a transformer station, will need to undergo measures similar to those taken to protect electricity meters?'

Jurisdiction of the Court

37 In its order for reference, the KZD sets out the reasons for which it considers that it is a 'court or tribunal' within the meaning of Article 267 TFEU. The Bulgarian Government and the European Commission also consider that the KZD has such a character, and that the Court of Justice therefore has jurisdiction to give a ruling on the questions referred to it by that body. However, CEB and CRB express doubts on this matter and argue, first of all, that the KZD does not have compulsory jurisdiction, second, that that body does not offer sufficient guarantees as to its independence and, third, that the proceedings pending before that body are not intended to lead to a decision of a judicial nature.

38 In that regard, it should be recalled, as a preliminary point, that, according to settled case-law, in order to determine whether a body making a reference is a court or tribunal for the purposes of Article 267 TFEU, which is a question governed by EU law alone, the Court takes account of a number of factors, such as whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is *inter partes*, whether it applies rules of law and whether it is independent (see, in particular, Case C-196/09 *Miles and Others* [2011] ECR I-0000, paragraph 37 and the case-law cited).

39 In addition, a national court may refer a question to the Court only if there is a case pending before it and if it is called upon to give judgment in proceedings intended to lead to a decision of a judicial nature (see, in particular, Case C-53/03 *Syfait and Others* [2005] ECR I-4609, paragraph 29 and the case-law cited).

40 Therefore, it is appropriate to determine whether a body may refer a case to the Court of Justice on the basis of criteria relating both to the constitution of that body and to its function. In that connection, a national body may be classified as a court or tribunal within the meaning of Article 267 TFEU, when it is performing judicial functions, but when exercising other functions, of an administrative nature, for example, it cannot be recognised as such (see, in particular, order of 26 November 1999 in Case C-192/98 *ANAS* [1999] ECR I-8583, paragraph 22).

41 It follows that, in order to establish whether a national body, entrusted by law with different categories of functions, is to be regarded as a court or tribunal within the meaning of Article 267 TFEU, it is necessary to determine in what specific capacity it is acting within the particular legal context in which it seeks a ruling from the Court (see order in *ANAS*, paragraph 23).

42 Therefore, as regards the present case, it should be observed that although the KZD is called on, in particular, as the body responsible for promoting equal treatment referred to in Article 13 of Directive 2000/43, to exercise various functions which are not in any way of a judicial nature, in the present case, having regard to the functions that it exercises in the proceedings which gave rise to the present request for a preliminary ruling, it is appropriate to ascertain whether or not that body may be regarded as a court or tribunal within the meaning of Article 267 TFEU.

43 In that connection, it is clear from Article 50 of the ZZD that proceedings taking place before the section of the KZD which made the present request for a preliminary ruling may originate either from an application from a person who considers himself a victim of discrimination, pursuant to Point 1 of that provision, or as a complaint made by natural and legal persons or State or local authority bodies, as provided for in Point 3 of Article 50 of the ZZD or, lastly, in an initiative of the KZD itself in accordance with Point 2 of that article.

44 In the present case, it is clear from the assessments made by the KZD as set out in paragraph 24 of this judgment, that Mr Belov brought a complaint before it both on the basis of Article 50(1) of the ZZD, as a person directly concerned by the measure at issue in the main proceedings, and Article 50(3) of the ZZD in so far as he claims also to act on behalf of other inhabitants of the two districts concerned by that measure.

45 It is, in particular, in taking account of the functions that the KZD is called on to exercise when a case is referred to it that it is appropriate in the present case to determine whether that body must be classified as a court or tribunal within the meaning of Article 267 TFEU.

46 In that connection, it must be held that the various factors, among those relied on by CEB and CRB,

which are capable of giving rise to doubts that the proceedings before the KZD based on Article 50(1) and (3) of the ZZD are intended to lead to a decision of a judicial nature for the purposes of the case-law set out in paragraph 39 of this judgment.

47 In the first place, it is clear from Article 50(2) of the ZZD that similar proceedings to those which gave rise to the present request for a preliminary ruling could, in relation to the same facts, equally have been brought by the KZD acting on its own initiative. It is apparent, in light of the information before the Court, that, regardless of the circumstances in which the case was referred to that body on the basis of Article 50 of the ZZD, that is, by way of application, complaint or of its own motion, that body is required to bring proceedings which are essentially similar in which it has, inter alia, extensive powers of investigation in order to gather the evidence necessary to elucidate the facts concerned. Furthermore, the results to which those proceedings are intended to lead thus initiated by application, complaint or of the KZD's own motion, are themselves similar, namely an injunction to cease the discrimination found and an order for the persons responsible for it to pay fines.

48 In the second place, it is common ground that the KZD may, as it has done in the present case, join to the proceedings, of its own motion, other persons than those expressly appointed by the party which has brought the action before it by way of an application or a complaint, in particular where the KZD considers that those parties may have to answer for the discrimination alleged by the applicant/complainant and/or be liable to pay a fine on that basis.

49 Third, it is also common ground, on the basis of the information submitted to the Court, that, where an action is brought against a decision of the KZD adopted after proceedings have been brought on the basis of Article 50 of the ZZD, that body has the status of defendant before the administrative court called on to give a ruling on that application. Furthermore, if the decision of the KZD is annulled by the administrative court before which an action has been brought, that body may appeal against the decision to annul before the Varhoven administrativen sad.

50 Fourth, it also seems to follow from the Administrative Procedural Code, as alleged at the hearing by CEB and CRB and confirmed by Mr Belov, that, if an action is brought against a decision of the KZD given in proceedings such as those at issue in the main proceedings, it is possible for that body to revoke that decision, if the party to whom the decision is addressed is favourable.

51 All the circumstances lead to the view that the decision that the KZD is called on to give at the end of proceedings brought before that body on the basis of Article 50 of the ZZD and in particular subparagraphs 1 and 3 thereof, is similar in substance to an administrative decision and do not have a judicial nature within the meaning of the case-law of the Court relating to the concept of 'court or tribunal' in Article 267 TFEU.

52 Furthermore, it must be stated in that connection that, if such a decision of the KZD is, as stated, subject to appeal before an administrative court whose decision is itself subject to appeal before the Varhoven administrativen sad, the existence of those judicial appeals ensures the effectiveness of the mechanism of the request for a preliminary ruling provided for in Article 267 TFEU and the uniform interpretation of European Union law and, in the present case, in particular of Directive 2000/43, that that provision of the Treaty seeks to ensure. Under Article 267 TFEU, such national courts have the option or, where appropriate, are required to make a request for a preliminary ruling to the Court where a decision on the interpretation or the validity of European Union law is necessary to give their judgment.

53 Similarly, it must be observed that before the Court decisions of the Varhoven kasatsionen sad

(Supreme Court of Cassation) (Bulgaria) were cited of 22 January 2009 and of the Varhoven administrativen sad of 27 October 2010, from which it is clear that the ZZD put in place two alternative independent procedures enabling a person who, like Mr Belov, considers himself to be the victim of discrimination to request that that discrimination should cease. Apart from the possibility to initiate administrative type proceedings, such as those pending before the KZD in the case in the main proceedings based on Article 50 of the ZZD, the person concerned also has the possibility to bring an action before the Rayonen sad (District Court) (Bulgaria) which hears civil matters in order to put an end to such discrimination and the payment of damages.

54 Since the finding in paragraph 51 of this judgment suffices to conclude that when the KZD is called on to exercise a function such as that required of it in the main proceedings, that body is not a 'court or tribunal' within the meaning of Article 267 TFEU, there is no need to examine whether the other criteria for assessing whether a referring body is a 'court or tribunal' for the purposes of Article 267 TFEU are satisfied by the KZD nor therefore to give a ruling on the other objections made by CEB and CRB in that regard (see, to that effect, Case C-517/09 *RTL Belgium* [2010] ECR I-14093, paragraph 48).

55 It follows from all of the foregoing that the Court does not have jurisdiction to rule on the questions referred by the KZD.

Costs

56 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Fourth Chamber) hereby rules:

The Court of Justice of the European Union does not have jurisdiction to answer the questions referred by the Komisia za zashtita ot diskriminatsia in its order for reference of 19 July 2011.

[Signatures]

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* Language of the case: Bulgarian.

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Environmental judgements by the Court of Justice and their duration

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Environmental judgments by the Court of Justice and their duration

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Infringement procedures under the EC Treaty

Little attention is paid, until now, to the duration of environmental procedures under Articles 226 and 228 EC Treaty, though these procedures are the only instrument at the disposal of the European Commission to enforce the application of EC environmental law[1]. Indeed, the Commission itself has no possibility to impose a fine or a penalty payment against a Member State, or to withhold sums under the Structural Funds, where a Member State persistently infringes Community environmental law. Rather, the Commission is obliged to first issue a Letter of Formal Notice against a Member State which infringes Community law. Where the infringement is not repaired, the Commission may issue a Reasoned Opinion against the Member State, and if also this does not lead to the compliance with EC law, it may appeal to the Court of Justice[2]. At this moment, it may also ask for interim measures on which only the Court of Justice may decide.

The judgment by the Court is declaratory: the Court states, if it finds a case of non-compliance, that the Member State in question has infringed its obligations under Community law, by not doing this or that. It is then up to the Member State to take the necessary measures in order to bring its national law in line with the requirements of Community law. Where the Member State does not do so, the Commission may send, under Article 228 EC Treaty, a second letter of formal notice, then a second reasoned opinion and, should this not be successful, seize the Court of Justice a second time. The Court may then, in its judgment under Article 228 EC Treaty and on request of the Commission, impose a lump sum or a penalty payment on the Member State in question.

These provisions apply to all three forms of national infringements, i.e. cases, where a Member State did not transpose EC secondary legislation into its national legal order (non-transposition), where the Member State transposed secondary EC legislation in an incomplete or incorrect way (incorrect transposition), or where a Member State did not correctly apply primary or secondary Community law in concrete cases (incorrect application). Of course, nothing prevents the Commission from bringing a case against a Member State which groups aspects of incorrect transposition with aspects of incorrect application. Nevertheless, the differentiation is of use, because the object of litigation in the case of incorrect transposition is of purely legal nature, while in the case of incorrect application the practice of a Member State, at national, regional or local level, is examined by the Commission and, subsequently, by the Court.

The duration of litigation is also of interest in other cases. Article 230 EC Treaty concerns those cases, where an action is brought against a Community institution or body. In these cases, no pre-judicial procedure is foreseen, and thus, the overall duration of the procedure is much shorter. Also in the cases of Article 234 EC Treaty, where a national court asks the EC Court of Justice for a preliminary ruling, no pre-judicial procedure is required.

One would have wished that in cases of Articles 242 and 243 EC Treaty which concern interim measures, the Commission would be allowed to ask the Court for such interim measures, without having first to send letters of formal notice and reasoned opinions. However, these provisions do not provide for an exception to

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[1] For previous years see L. Krämer, Statistics on environmental judgments by the EC Court of Justice, Journal of Environmental Law 2006, p.407, with further references.

[2] For details see Article 226 EC Treaty.

Articles 226 and 228. It will be shown below that the pre-judicial phase of litigation – the issuing of letters of formal notice and of reasoned opinions – normally takes a long time; this then leads to the situation that the Commission, when finally the application to the Court is made, has great difficulties to explain that interim measures are necessary in view of the urgency of the case or the threat to the environment. This is the underlying reason, why in the more than thirty years between 1976 and 2007, only 10 environmental procedures had been brought to the Court which asked for interim measures[3].

The Commission does not normally publish the letter of formal notice or the reasoned opinions which it issues[4]. It also refuses to give, under the EC provisions on access to documents[5] or access to environmental information[6], access to them on request. In this attitude, it appears to be supported by the Court of First Instance which agreed with the Commission that the refusal to give access allowed the Member State in question and the Commission to find an amicable solution to the problem in question[7]. The Court of First Instance did not discuss that just the publication of letters of formal notice and reasoned opinions might facilitate such an amicable solution. The Court of Justice did not yet decide on this question.

The following contribution gives some statistical data on the duration of environmental procedures – pre-judicial and judicial – under the different Treaty provisions. The contribution concentrates on the years 2006 and 2007. Data on previous years which have been published earlier will be used to show trends in the duration.

"Environmental" cases are understood in a material sense. Thus, where, for example, a case deals with the question, whether a Member State is entitled to adopt national legislation on air emissions by cars that deviates from existing EC legislation, the case is considered to be an environmental case, though the interpretation of Article 95(4) and (5) EC Treaty is at stake – and the Court of Justice's own classification system would range such a case under "institutional matters" or "free circulation of goods". Generally, this classification gives good results; sometimes, though, doubts might exist, whether a product-related directive should be classified as an "environmental" or a "free circulation of goods" act of legislation.

Number and legal basis of judgments

In 2006 and 2007, there were 115 judgments on environmental matters delivered, more than in any earlier two-year period. On average, the Court delivered about one environmental judgment per week (Table 1).

Table 1: Number of Decisions in environmental matters 1976-2007

1976	1	1987	12	1998	34
1977	-	1988	9	1999	23
1978	-	1989	3	2000	21
1979	-	1990	11	2001	23
1980	3	1991	17	2002	47
1981	3	1992	7	2003	56
1982	7	1993	12	2004	63

[3] See Table 3 below.

[4] See L. Krämer, Access to letters of formal notice and reasoned opinions in environmental law matters, European Environmental Law Review 2003, p.197.

[5] See on that Article 255 EC Treaty and Regulation 1049/2001, OJ 2001, L 145 p.43.

[6] See Regulation 1367/2006, OJ 2006, L 264 p.13.

[7] Court of First Instance, Cases T-105/95, WWF v. Commission, ECR 1997, p.II-313; T-191/99, Petrie a.o. v. Commission ECR 2001, p.II-3677.

1983	1	1994	14	2005	43
1984	4	1995	7	2006	52
1985	5	1996	29	2007	63
1986	1	1997	20	Total	587

The increase of decisions over the last years is mainly due to the fact that the Commission examines more systematically the cases of non-transposition and of incorrect transposition and, furthermore, that individual persons apply more frequently to the Court.
The 115 judgments were divided on the different sectors of environmental law as follows (Table 2).

Table 2: Decisions concerning the different sectors of environmental law 1976-2007(all legal bases)

Period	Waste	Water	Nature	Products	Horizontal Acts	Air Climate	Impact Assessment	Noise	Total
1976-1991	23	18	13	8	4	6	-	-	72
1992-1994	11	6	9	4	-	1	2	-	33
1995-1997	13	7	10	13	8	3	3	-	57
1998-1999	9	19	5	7	5	2	7	3	57
2000-2001	8	15	11	4	3	2	1	-	44
2002-2003	27	14	14	19	18	3	4	4	103
2004-2005	41	17	16	12	4	9	7	-	106
2006-2007	20	12	30	9	12	17	12	3	115
Total	152	108	108	76	54	43	36	10	587

As can be seen, the greatest number of cases during 2006-2007 concerned nature protection issues. In eight of the total of 30 cases, individual persons had applied to the Court, because they opposed the inclusion of their land property in the EC-lists of Natura 2000 which groups habitats of fauna and flora of Community interest. They were all unsuccessful, as the Court declared that they were not directly and individually affected by such a decision[8]. In view of legal consequences which flow from the Commission's decision on lists of Community interest, I am rather of the opinion that individual persons do have standing under Article 230 EC Treaty.
Waste matters rank second in 2006-2007, though in the overall period 1976-2007, they continue to occupy a lead position. Waste treatment and disposal remains a problem in most Member States – not only in Italy – and the shared competence between administrations at local, regional, national and Community level does not facilitate environmentally sound waste management practices. The reviewed EC legislation on waste[9] is not likely to change much of this situation.

[8] See for example Court of First Instance, Cases T-136/04 Fhr.v.Cramer v. Commission, ECR 2006, p.II-1805; T-150/05 Sahlstedt v. Commission, ECR 2006, p.II-1851; T-117/05 Rodenbröker v. Commission, ECR 2006, p.II-2593; T-122/05, Benkö v. Commission, ECR 2006, p.II-2939.

[9] See Regulation 1013/2006 on the shipment of waste, OJ 2006, L 190 p.1; Directive 2006/66 on batteries, OJ 2006, L 266 p.1, and in particular the imminent adoption of the revision of Directive 2006/12 on waste, OJ 2006, L 114 p.9

Table 2 clearly demonstrates the low priority of noise legislation in the Community. Noise is of considerable concern to numerous people in the EC, and the main source of noise is transport – which is a common EC policy. Yet, EC measures on noise are scarce and do not follow a consistent strategy, and this is even reflected in the number of court decisions on noise which concern lack of transposition or incorrect transposition, but not the application of noise protection levels.
Table 3 shows the legal basis of the Court's Decisions. It demonstrates the important role of the Commission in enforcing the application of Community environmental law (Articles 226 and 228 EC Treaty) which remains the significant aspect of the Table. As regards environmental law, the Commission almost has a monopoly for taking actions

Table 3: Legal basis of the Court's Decisions 1976-2007 (Number of cases)

Period	Art.226	Art.227	Art.228	Art.230	Art.232	Art.234	Art.242,243	Art.225(appeal)	Total
1976-1991	50	-	1	3	-	17	1	-	-
1992-1994	14	-	4	9	-	6	-	-	-
1995-1997	30	-	-	5	-	15	2	3	1
1998-1999	37	-	-	2	-	17	-	1	-
2000-2001	28	-	1	2	-	11	1	-	1
2002-2003	77	-	1	9	-	15	1	-	-
2004-2005	85	-	-	4	-	16	1	-	-
2006-2007	70	-	-	25	-	12	4	3	1
Total	391	-	7	59	-	109	10	7	3

in Court. All the more it is regrettable, that the procedures under Article 226 and 228 are so non-transparent. Indeed, the Commission does not lay accounts on its actions. Its annual reports on the monitoring the application of Community law[10] are unhelpful. They do not explain, why actions were started, they do not detail the pre-judicial procedures under Articles 226 and 228 – the dispatch of letters of formal notice is only mentioned, where a Member State has not communicated its national transposing legislation; where a Member State has incorrectly transposed the legislation or where it does not apply environmental legislation in practice, the Commission keeps this information confidential – and the basis of tables and statistics changes frequently so that comparisons from one year to the other are hardly possible. Letters of formal notice and reasoned opinions are only exceptionally made public.
The Commission's quasi-monopoly in enforcing EC environmental law also becomes obvious when one considers actions by environmental organisations against the breach of EC environmental law. Indeed, the three cases where environmental organisations were involved in 2006-2007, concerned the request from national courts for a preliminary ruling[11]. In practice, access to the EC Courts is not possible

[10] See last Commission, Monitoring the application of Community law 23rd Report, for 2005, COM (2006) 416; 24th Report, on 2006, COM(2007) 398.
[11] Cases C-60/05 WWF v. Lombardia, ECR 2006, p.I-2147; C-138/05 Milieufederatie, ECR 2006, p.I-8339; C-244/05 Bund Naturschutz, ECR 2006, p.I-8445.

for environmental organisations which have, in the past, seen all their actions declared inadmissible, as they were considered not to be directly and individually concerned by the breach of EC environmental legislation[12]. This practice appears not to be in compliance with the provisions on access to justice of the Aarhus Convention[13] which, after its ratification by the EC, is part of EC law and binds the EC institutions, including the EC Courts.
Table 4 differentiates Court judgments against Member States, based on Article 226 and 228 EC Treaty. For the years 2006-2007, Italy ranks top. The Table illustrates the policy of the Scandinavian States Denmark, Sweden and, to a lesser degree, Finland, to avoid, if any possible, negative judgments by the Court of Justice, by ensuring that compliance measures are taken; the contrast between Denmark on the one hand and Ireland and Great Britain on the other hand which all joined the EU in 1973, is as noticeable as the contrast between Austria and Sweden/Finland which all three joined the EU in 1995. The same active policy to ensure compliance is ensured by the Netherlands. Generally, however, Table 4, as all the other Tables in this paper, should be viewed as showing some trends rather than allowing too precise conclusions.

Table 4: Environmental judgments against Member States 1976-2007 (Articles 226 and 228 EC Treaty)

	1976 -1991	1992 -1994	1995 -1997	1998 -1999	2000 -2001	2002 -2003	2004 -2005	2006 2007	Total
Italy	15	2	5	5	3	9	16	16	71
Belgium	14	4	6	6	3	6	5	4	48
France	6	1	2	3	7	14	7	2	42
Germany	9	4	8	5	1	6	6	1	40
Spain	1	2	1	4	2	11	8	6	35
Greece	1	1	5	3	3	4	8	4	30
UK	-	2	-	1	2	7	7	7	26
Luxembg	1	1	2	2	1	7	-	10	24
Ireland	-	-	-	1	2	7	5	6	21
Portugal	-	-	-	7	2	2	6	4	21
Netherld	4	1	-	1	1	3	5	-	15
Austria			-	-	1	-	7	5	13
Finland			-	-	-	1	3	5	9
Denmark	2	-	-	-	-	1	1	-	3
Sweden			-	-	1	-	1	-	2
Malta							-	1	1

It might be interesting to compare this Table 4 with the Table on environmental cases which were submitted by national courts to the Court of Justice for a preliminary ruling (Article 234 EC Treaty). These cases are listed in Table 5.

Table 5: Preliminary rulings in environmental matters 1976-2007 (grouped according to the Member State of the requesting court)

	1976-1991	1992-1994	1995-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	Total

[12] The landmark cases are T-585/93 Greenpeace v. Commission ECR 1995, p.II-2205 and C-321/95P Greenpeace v. Commission ECR 1998, p.I-1651.

[13] Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention) of 25 June 1998. The EC ratified this Convention by Decision 2005/370, OJ 2005, L 124 p.1.

Italy	6	2	6	4	2	1	4	2	27
Netherld.	5	-	2	5	1	2	3	2	20
France	4	2	1	-	2	2	1	1	13
Belgium	1	1	4	1	-	-	4	-	11
Germany	-	1	-	3	2	-	3	1	10
UK	-	-	1	1	1	2	1	2	8
Sweden			1	1	1	1	-	3	7
Finland			-	1	-	3	-	-	4
Austria			-	-	-	4	-	-	4
Denmark	-	-	-	1	1	-	-	1	3
Luxembg	-	-	-	-	1	-	-	-	1
Spain	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Total	16	6	15	17	11	15	16	12	108

It is not surprising that Italian and Dutch courts top this list. Indeed, Italian courts are – at the latest following the role in the "mani pulite"-events in the 1990s – known for their creative ingenuity and intellectual curiosity. This is probably the reason, why they actively explore, be it via requests for a preliminary ruling, what kind of legal arguments EC environmental law offers. As regards the Netherlands, about three quarters of their gross national products stems from foreign trade. In that country, EC environmental law is frequently seen as an opportunity and, in any way, as part of the national provisions which aim at the optimisation of environmental protection.

. Germany, with the largest population, sophisticated environmental legislation and a very great number of courts, submitted remarkably few cases for a preliminary ruling; these figures reflect the generally rather reserved attitude of the German judiciary and legal profession in general with regard to EC environmental law.

The four Member States Spain, Portugal, Ireland and Greece, as well as the twelve Member States which joined the European Union in 2004, have not yet been the cause of any preliminary ruling from the Court of Justice in environmental matters.

Article 228(1) EC Treaty states that a Member State shall take the necessary measures in order to comply with the statements of a judgment by the Court of Justice. The European Commission regularly publishes a list of judgments of the Court of Justice which had not yet been complied with by the Member States at the end of each year. With the increase of the number of judgments in environmental matters (see on that Table 1), also the overall figures of non-compliance increased. At the end of 2005, 81 judgments, and at the end of 2006 66 judgments had not yet complied with[14]. Table 5 lists the evolution of the last five years.

Table 5: Number of judgments that had not been complied with by the end of the year (all legal bases)

Member State	2002	2003	2004	2005	2006
France	13	17	18	14	7
Italy	6	6	14	12	8
Ireland	8	6	8	9	7
Spain	4	6	4	9	7
UK	4	3	6	7	8
Belgium	6	8	6	5	3
Greece	4	4	5	7	6

[14] Annual reports on monitoring application (note 10, above), each time annex V.

Luxembg	5	6	1	-	6
Portugal	1	3	5	4	4
Germany	3	4	5	3	1
Austria	1	1	4	5	5
Netherld	2	4	4	3	-
Finland	-	1	3	2	3
Sweden	1	1	2	1	1
Denmark	-	1	1	-	-
Total	58	71	86	81	66

Of course, the figures for the different years may not be cumulated. Nevertheless, Table 5 shows that the above-mentioned four States Denmark, Sweden, Finland and Netherlands also attach some political importance to quickly comply with the judgments of the Court of Justice. In France, Italy, Ireland and Spain, such a policy seems to be less a priority.

Duration of procedures

The duration of litigation before the Courts is of particular interest for economic operators, but also for environmental organisations, administrations and lawyers. Table 6 shows the duration during the years 2006-2007.

Table 6: Duration of Court litigation 2006-2007 (in months, figures rounded)

Legal Basis	Number of cases	Longest duration	Shortest duration	Average
Article 226	70	39	5	18
- lack of transposition	15	14	5	9
- incorrect transposition	21	34	6	19
- incorrect application	34	39	5	21
Article 230	25	50	2	21
- Court 1st Instance	21	50	2	21
- Court of Justice	7	34	12	23
Article 234	12	36	9	19

On average thus, Court procedures under Article 226 take 18 months, under Article 230 21 months and under Article 234 19 months. Where the action concerns a case of lack of transposition, the procedure takes 9 months only.

The duration of Court litigation under Article 226 has not significantly changed during the last fifteen years, as can be seen from Table 7. This is different from actions under Article 230 – the duration varied between 14 and 33 months – and Article 234, where the variation was between 16 and 24 months. Overall, for all three legal bases, a reduction of the duration as compared to the previous period 2004-2005 can be observed.

Table 7: Duration of Court litigation 1992-2007 (in months, figures rounded)

Period	Article 226	Article 230	Article 234
1992-1994	22	14	18
1995-1997	14	20	16
1998-1999	20	29	23
2000-2001	21	16	24
2002-2003	19	33	26

2004-2005	20	30	22
2006-2007	18	23(1st Inst:21)	19

For procedures under Article 226 EC Treaty which oppose the European Commission and a Member State, the duration of the litigation before the Court itself might be misleading, because in all cases, the litigation before the Court has to be preceded by a pre-judicial procedure. This procedure is, as mentioned above, opened by the dispatch of a Letter of Formal Notice[15] to which the Member State in question may answer. When the Commission considers the infringement of Community law not yet to be ended, it may issue a Reasoned Opinion to which the Member State again may react. Only then may the Commission make an application to the Court.
Table 8 indicates the duration of procedures under Article 226, from the dispatch of the Letter of Formal Notice till the judgment of the Court:

Table 8: Duration of procedures under Article 226 in 2006-2007 from the dispatch of the Letter of Formal Notice till the Court's judgment (figures in months and rounded)

Procedure	Number of cases[16]	Longest duration	Shortest duration	Average
Lack of transposition	12 (of 15)	35	21	26
Incorrect transposition	18 (of 21)	98	22	51
Incorrect application	31 (of 34)	109	26	52
Total	61 (of 70)	109	21	47

This means that the procedure under Article 226 EC Treaty takes, on average, almost four years – really a long time.
With regard to previous periods, this time-span has not significantly been reduced, as appears from Table 9:

Table 9: Duration of procedures under Article 226 in the years 1992-2007 (from dispatch of the letter of formal notice till the Court's judgment; figures in months and rounded)

Period	Number of cases	Longest duration	Shortest duration	Average
1992-1994	14	85	36	57
1995-1997	30	87	27	47
1998-1999	37	120	21	68
2000-2001	28	128	22	59
2002-2003	77	147	15	45
2004-2005	85	168	19	47
2006-2007	61	108	15	47

This long duration of litigation has several effects: First, Member States which do not correctly transpose or apply EC environmental legislation, can be ensured that it

[15] The term "letter of formal notice" is not found in Article 226 which does not require a specific form for the begin of the infringement procedures; however, the term is generally used. The Court appears to require a written form of notice in all cases, for reasons of legal certainty.

[16] Only those cases were included in this Table, where the precise date of the dispatch of the Letter of Formal Notice could be determined. The total number of cases in 2006-2007 is set in brackets.

takes a while before they are called to order by the judgment of the EC Court of Justice, with all its negative publicity. This effect is increased by the fact that the Commission often does not start the procedure under Article 226 EC Treaty as soon as the national incorrect legislation is adopted or as soon as there is a concrete case of non-application. Rather, the delay between the enactment of the national legislation and the begin of the infringement procedure is frequently quite considerable[17].

Second, this problem of delays becomes even more important in cases of Article 228 EC Treaty. In 2006-2007, there were no such cases decided in environmental matters. Since 1992, the Court of Justice had decided, overall, six environmental cases under Article 228 and its predecessor, Article 171 EC Treaty. The average time-span between the dispatch of the letter of formal notice under Article 226 and the judgment under Article 228 was 136 months, thus more than eleven years[18].

It is clear that such delays do not have much of a deterrent effect on Member States, inciting them to comply with Court judgments – and, this should not be forgotten, to adequately protect their environment! - as quickly as possible.

This observation might sound abstract and theoretical. A concrete example, though, is the case of the present waste problems in the Italian region of Campania (Naples). The EC procedure against Italy for non-compliance with EC waste law started in 1987[19], but was later discontinued. More than twenty years later, Italy still does not comply with its legal requirements.

Though the length of procedures under Articles 226 and 228 EC Treaty may not have a deterrent effect on Member States by inducing them to align their legislation and practice to EC environmental law, it certainly has a deterrent effect on the EC Commission, in the sense that the Commission does not even start proceedings against a Member State. This happens in particular, where cases on the lack of application of EC environmental law are in question. The construction of a motorway without an environmental impact assessment, the refusal to grant access to environmental information, the realisation of infrastructure projects within a natural habitat – there are numerous cases of this kind, where the Commission does not begin or pursue infringement procedures, because a judgment from the Court would come at a stage, when the environmental impairment has occurred and cannot be repaired – when “the infringement is consumed”, as it is called in the Brussels jargon.

Table 10 tries to elucidate the reasons for the length of procedure, differentiating between the pre-Court procedure – from the dispatch of the Letter of Formal Notice till the application to the Court – and the procedure before the Court.

Table 10: Average duration of procedures under Article 226 in 2006-2007 (in months; figures rounded)

	Pre-Court procedure	Court procedure	Total duration
Lack of transposition	16	8	24
Incorrect transposition	33	21	54
Incorrect application	27	23	50
Total	28	19	47

[17] See, for example case C-376/06 Commission v. Portugal, ECR 2007, p.I-78, where this period was 26 months.

[18] See cases C-345/92, Commission v. Germany, ECR 1993, p.I-1115 (duration 109 months); C-174/91, Commission v. Belgium, ECR 1993, p.I-2275 (duration 106 months); C-366/89, Commission v. Italy, ECR 1993, p.I-4201 (duration 175 months); C-291/93 Commission v. Italy, ECR 1994, p.I-859 (duration 120 months); C-378/97 Commission v. Greece, ECR 2000, p.I-5047 (duration 134 months); C-278/01, Commission v. Spain, ECR 2003, p.I-14141 (duration 170 months).

[19] See case C-33/90, Commission v. Italy, ECR 1991, p.I-5698 and, for the background L.Krämer, European Environmental Law Casebook, London 1993, p. 387.

These data show that in all cases the pre-Court procedure was longer than the procedure before the Court itself. Part of the explanation is certainly that the Commission is obliged to clarify the facts of a case which is often done during the pre-Court procedure; and this takes time, all the more, when Member States do not answer requests for information or are otherwise reluctant to assist the Commission.
However, in the cases of lack of transposition and incorrect transposition, the factual side of a specific case does not offer specific difficulties. Indeed, where a Member State has not transposed an environmental directive into its national law, the legal situation is quite clear and one might imagine that the Commission clarifies this situation before it starts the procedure under Article 226 EC Treaty.
The situation of incorrect transposition has to be examined merely under legal aspects, too: the national legislation must be compared with the environmental directive, as to whether it is correct and whether it covers the whole of the territory of a Member State. This is best done before infringement procedures start. Then, however, it is not clear, why the Commission needs, on average, more than two and a half years before it applies to the Court (incorrect transposition) and 16 months in those cases, where no national legislation exists.
Table 11 shows that in the past, the pre-Court procedure was always longer than the Court procedure and never shorter than two years. Also, the duration of the procedure before the Court was remarkably stable during the last ten years.

Table 11: Comparison of the average duration of procedures under Article 226 EC Treaty between 1992 and 2007 (in months; figures rounded)

Period	Pre-Court procedure	Court procedure	Total duration
1992-1994	35	22	47
1995-1997	33	14	47
1998-1999	48	20	68
2000-2001	38	21	59
2002-2003	26	19	45
2004-2005	27	20	47
2006-2007	28	19	47

In order to further explore the origin of the delays in these procedures, the cases where the length of procedure between the dispatch of the letter of formal notice and the Court judgment exceeded 80 months, underwent a more detailed scrutiny. The 80-month length is admittedly arbitrary; however, it allows comparisons with previous years.
In 2006-2007, there were five cases which took, overall, more than eighty months, as is shown by Table 12.

Table 12: Court judgments under Article 226 with a total duration of more than 80 months between the dispatch of the letter of formal notice and the judgment (in months; figures rounded)

Date, number of judgment	Date Letter of Formal Notice	Reply by Member State	Date Reasoned Opinion	Reply by Member State	Application to the Court	Total duration of procedure
28-6-07 C-235/04 Comm. v.	26-1-00	18-5-01	31-1-01	17-4-01	4-6-04	53+36 = 89 months; Nature Conservation

Spain						
12-7-07 C-507/04 Comm. v. Austria	13-4-00	26-7-00	17-10-03	23-12-03	28-12-04	56+31= 87 months; Nature Conservation
13-12-07 C-418/04 Comm. v. Ireland	11-11-98		24-10-01		29-9-04	72+37= 109 months; Nature Conservation
18-12-07 C-195/05 Comm.v. Italy	22-10-99	11-6-01	11-7-03	4-11-03	2-5-05	62+32= 94 months; Waste Management
10-5-07 C-508/04 Comm.v. Austria	13-4-00	27-7-00	17-12-03	23-12-03	8-12-04	56+29= 85 months; Nature conservation

The Table shows that the main cause of delay in these procedures is the failure by the European Commission to decide on or execute the next step in the procedure. Indeed,

- in case C-235/04, 38 months passed between the answer of the Member State to the Reasoned Opinion and the application to the Court;
- in case C-507/04, 39 months passed between the answer of the Member State to the Letter of Formal Notice and the dispatch of the Reasoned Opinion;
- in case C-418/04, 37 months passed between the dispatch of the Letter of Formal Notice and that of the Reasoned Opinion; and another 35 months passed between the dispatch of the Reasoned Opinion and the Application to the Court;
- in case C-195/05, 25 months passed between the Member State's answer to the Letter of Formal Notice and the dispatch of the Reasoned Opinion; and another 18 months passed between the Member State's answer to the Reasoned Opinion and the application to the Court;
- in case C-508/04, 41 months passed between the Member State's answer to the Letter of Formal Notice and the dispatch of the Reasoned Opinion.

Such delays cannot be explained by lack of human resources, translation problems or other administrative circumstances, all the more as three of the five cases concerned the incorrect legal transposition of an EC directive into national legislation; thus, there were no matters of fact to be clarified.

The Commission never even tried to explain such delays – which have been existing since years and are, with regard to administrative behaviour, only the tip of the iceberg. It had already been mentioned above that procedures which take, on average, 47 months, simply are too lengthy. The Commission, though, keeps the precise internal provisions on the procedure under Article 226 EC Treaty confidential. Of course, its annual reports on the monitoring the implementation of Community law do not discuss such items as the length of procedure, and the separate reports on the monitoring the implementation of environmental legislation are also silent on this issue.

In this context, the quasi-monopoly of the Commission to bring cases on environmental matters before the Court of Justice gains all its weight: if the Commission delays procedures to protect the environment or does not take steps

under Articles 226/228 EC Treaty at all – who then will protect the environment? Environmental organisations and individual persons have practically no access to the Court of Justice. True, the European Union is not a State and one should not be too surprised that there is nobody else to ensure the enforcement of *European* law or to protect the *European* environment. Yet, the EU Treaty mentions the European general interest as a value to be protected[20]. And all experience shows that Member States which perceive EC (environmental) laws all too often as "foreign laws"[21], have a limited interest to protect the environment in cases of conflict with other, planning or economical, interests

Concluding remarks

The data for 2006-2007 on environmental judgments by the EC Court of Justice confirm the trends of previous years: The number of environmental judgments delivered by the Court increase. Article 226 remains by far the principal legal basis for the Court decisions, which underlines the important role of the Commission in ensuring the application of EC environmental law. Court actions of one Member State against the other do not exist in environmental law; the Member States prefer to leave it to the European Commission to take action against a specific Member State. The number of actions based on Article 230 EC Treaty increased, though all applications of individual persons against the inscription of their land on the list of natural habitats of Community interest were rejected as inadmissible.

Most judgments were given against Italy which also was the most often condemned by the Court since 1976. In this overall list follow with Belgium, France and Germany three other of the original six EC Member States. They are followed by Spain which only joined the EC in 1986. Remarkable is the low number of judgments which were given against Denmark, Sweden and Finland, as well as against the Netherlands which is also one of the original six Member States.

The duration of litigation before the Court – 18 to 20 months - remains stable since about ten years. The same is true for the duration of the procedure under Article 226 – pre-Court procedure *and* Court litigation – which takes, on average, 47 months, thus almost four years. The duration of procedures appears unacceptably long, in particular as regards cases of lack of transposition of EC legislation into national law (average 26 months) and the incorrect transposition (average 51 months). The pre-litigation procedure takes more time than the procedure before the Court itself. A closer look at cases which took more than 80 months reveals that the length of procedure is essentially due to delays for which the European Commission is responsible.

The lessons to learn from these data appear clear: the European Commission has a quasi-monopoly in enforcing EC environmental law and bringing cases before the Court of Justice. The best remedies against monopolistic situations are well known from economic policy:

(1) Transparency. This means that the Commission should publish the rules and provisions which govern the EC infringement procedures.

(2) Openness. This means that the Commission should publish the Letters of Formal Notice and Reasoned Opinions which it decides against Member States. At present, these decisions are kept confidential, with no convincing arguments. The Commission goes even so far to keep confidential the legal studies which it undertakes to examine Member States' correct transposition of EC legislation[22]

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[20] See Article 213 EC Treaty.

[21] Commission, European Governance, A White Paper, COM (2001) 428, p.25.

[22] See European Parliament, Resolution of 21 February 2008, no 7: "The European Parliament.. is not satisfied with the Commission's answer concerning the confidentiality of

(3) Competition. This means that the Commission should present legislative proposals which allow environmental organisations and individual persons to have legal standing before the Court of Justice in environmental matters. And the European Parliament and the Council should speedily adopt such proposals, in order to at last comply with the requirements of the Aarhus Convention in this regard.

What happened instead in 2006-2007 is that the Commission decided not to look at (environmental) complaints any more, but to concentrate on the non-transposition of Community legislation, on non-compliance with judgments of the Court (Article 228 EC Treaty, and on cases which raise fundamental problems[23]. As environmental complaints constitute by far the largest source of information for the Commission as regards the application of EC environmental legislation in practice within the 27 Member States, the Commission deliberately changed its policy to seriously control the effective application of EC environmental law. In my opinion, this reduction is not compatible with Article 211 EC Treaty which requires the Commission to ensure that EC law, including EC environmental law, is not only transposed into national law, but that it is "applied".

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the conformity studies; calls once more on the Commission to publish on its website the studies requested by the various Directorate-Generals on the valuation of the conformity of national implementation measures with Community legislation" (http://www.europarl.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+PG-TA).

[23] See Commission, COM (2007) 502. See on that European Parliament (note 22, above) no.19: "The European Parliament.. observes that the Commission is often the only body left to which citizens can turn to complain about the non-application of Community law; is therefore concerned that, by referring back to the Member States concerned (which is the party responsible for the incorrect application of Community law in the first place), the new working method could present a risk of weakening the Commission's institutional responsibility for ensuring the application of Community law as the "guardian of the Treaty" in accordance with Article 211 of the EC Treaty.

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DIRECTIVES

DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 24 November 2010

on industrial emissions (integrated pollution prevention and control)

(Recast)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Economic and Social Committee ([1]),

Having regard to the opinion of the Committee of the Regions ([2]),

Acting in accordance with the ordinary legislative procedure ([3]),

Whereas:

(1) A number of substantial changes are to be made to Council Directive 78/176/EEC of 20 February 1978 on waste from the titanium dioxide industry ([4]), Council Directive 82/883/EEC of 3 December 1982 on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry ([5]), Council Directive 92/112/EEC of 15 December 1992 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry ([6]), Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations ([7]), Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste ([8]), Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants ([9]) and Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control ([10]). In the interests of clarity, those Directives should be recast.

(2) In order to prevent, reduce and as far as possible eliminate pollution arising from industrial activities in compliance with the 'polluter pays' principle and the principle of pollution prevention, it is necessary to establish a general framework for the control of the main industrial activities, giving priority to intervention at source, ensuring prudent management of natural resources and taking into account, when necessary, the economic situation and specific local characteristics of the place in which the industrial activity is taking place.

(3) Different approaches to controlling emissions into air, water or soil separately may encourage the shifting of pollution from one environmental medium to another rather than protecting the environment as a whole. It is, therefore, appropriate to provide for an integrated approach to prevention and control of emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention. Such an approach will also contribute to the achievement of a level playing field in the Union by aligning environmental performance requirements for industrial installations.

([1]) OJ C 182, 4.8.2009, p. 46.

([2]) OJ C 325, 19.12.2008, p. 60.

([3]) Position of the European Parliament of 10 March 2009 (OJ C 87 E, 1.4.2010, p. 191) and position of the Council at first reading of 15 February 2010 (OJ C 107 E, 27.4.2010, p. 1). Position of the European Parliament of 7 July 2010 (not yet published in the Official Journal) and decision of the Council of 8 November 2010.

([4]) OJ L 54, 25.2.1978, p. 19.

([5]) OJ L 378, 31.12.1982, p. 1.

([6]) OJ L 409, 31.12.1992, p. 11.

([7]) OJ L 85, 29.3.1999, p. 1.

([8]) OJ L 332, 28.12.2000, p. 91.

([9]) OJ L 309, 27.11.2001, p. 1.

([10]) OJ L 24, 29.1.2008, p. 8.

(4) It is appropriate to revise the legislation relating to industrial installations in order to simplify and clarify the existing provisions, reduce unnecessary administrative burden and implement the conclusions of the Commission Communications of 21 September 2005 on the Thematic Strategy on Air Pollution (hereinafter the Thematic Strategy on Air Pollution), of 22 September 2006 on the Thematic Strategy for Soil Protection and of 21 December 2005 on the Thematic Strategy on the Prevention and Recycling of Waste adopted as a follow-up to Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme ([1]). Those Communications set objectives to protect human health and the environment which cannot be met without further reductions in emissions arising from industrial activities.

(5) In order to ensure the prevention and control of pollution, each installation should operate only if it holds a permit or, in the case of certain installations and activities using organic solvents, only if it holds a permit or is registered.

(6) It is for Member States to determine the approach for assigning responsibilities to operators of installations provided that compliance with this Directive is ensured. Member States may choose to grant a permit to one responsible operator for each installation or to specify the responsibility amongst several operators of different parts of an installation. Where its current legal system provides for only one responsible operator for each installation, a Member State may decide to retain this system.

(7) In order to facilitate the granting of permits, Member States should be able to set requirements for certain categories of installations in general binding rules.

(8) It is important to prevent accidents and incidents and limit their consequences. Liability regarding the environmental consequences of accidents and incidents is a matter for relevant national law and, where applicable, other relevant Union law.

(9) In order to avoid duplication of regulation, the permit for an installation covered by Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community ([2]) should not include an emission limit value for direct emissions of the greenhouse gases specified in Annex I to that Directive except where it is necessary to ensure that no significant local pollution is caused or where an installation is excluded from that scheme.

(10) In accordance with Article 193 of the Treaty on the Functioning of the European Union (TFEU), this Directive does not prevent Member States from maintaining or introducing more stringent protective measures, for example greenhouse gas emission requirements, provided that such measures are compatible with the Treaties and the Commission has been notified.

(11) Operators should submit permit applications containing the information necessary for the competent authority to set permit conditions. Operators should be able to use information resulting from the application of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment ([3]) and of Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances ([4]) when submitting permit applications.

(12) The permit should include all the measures necessary to achieve a high level of protection of the environment as a whole and to ensure that the installation is operated in accordance with the general principles governing the basic obligations of the operator. The permit should also include emission limit values for polluting substances, or equivalent parameters or technical measures, appropriate requirements to protect the soil and groundwater and monitoring requirements. Permit conditions should be set on the basis of best available techniques.

(13) In order to determine best available techniques and to limit imbalances in the Union as regards the level of emissions from industrial activities, reference documents for best available techniques (hereinafter BAT reference documents') should be drawn up, reviewed and, where necessary, updated through an exchange of information with stakeholders and the key elements of BAT reference documents (hereinafter BAT conclusions') adopted through committee procedure. In this respect, the Commission should, through committee procedure, establish guidance on the collection of data, on the elaboration of BAT reference documents and on their quality assurance. BAT conclusions should be the reference for setting permit conditions. They can be supplemented by other sources. The Commission should aim to update BAT reference documents not later than 8 years after the publication of the previous version.

([1]) OJ L 242, 10.9.2002, p. 1.
([2]) OJ L 275, 25.10.2003, p. 32.
([3]) OJ L 175, 5.7.1985, p. 40.
([4]) OJ L 10, 14.1.1997, p. 13.

(14) In order to ensure an effective and active exchange of information resulting in high-quality BAT reference documents, the Commission should establish a forum that functions in a transparent manner. Practical arrangements for the exchange of information and the accessibility of BAT reference documents should be laid down, in particular to ensure that Member States and stakeholders provide data of sufficient quality and quantity based on established guidance to enable the determination of best available techniques and emerging techniques.

(15) It is important to provide sufficient flexibility to competent authorities to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques. To this end, the competent authority may set emission limits that differ from the emission levels associated with the best available techniques in terms of the values, periods of time and reference conditions applied, so long as it can be demonstrated, through the results of emission monitoring, that emissions have not exceeded the emission levels associated with the best available techniques. Compliance with the emission limit values that are set in permits results in emissions below those emission limit values.

(16) In order to take into account certain specific circumstances where the application of emission levels associated with the best available techniques would lead to disproportionately high costs compared to the environmental benefits, competent authorities should be able to set emission limit values deviating from those levels. Such deviations should be based on an assessment taking into account well-defined criteria. The emission limit values set out in this Directive should not be exceeded. In any event, no significant pollution should be caused and a high level of protection of the environment taken as a whole should be achieved.

(17) In order to enable operators to test emerging techniques which could provide for a higher general level of environmental protection, or at least the same level of environmental protection and higher cost savings than existing best available techniques, the competent authority should be able to grant temporary derogations from emission levels associated with the best available techniques.

(18) Changes to an installation may give rise to higher levels of pollution. Operators should notify the competent authority of any planned change which might affect the environment. Substantial changes to installations which may have significant negative effects on human health or the environment should not be made without a permit granted in accordance with this Directive.

(19) The spreading of manure contributes significantly to emissions of pollutants into air and water. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution and Union law on water protection, it is necessary for the Commission to review the need to establish the most suitable controls of these emissions through the application of best available techniques.

(20) The intensive rearing of poultry and cattle contributes significantly to emissions of pollutants into air and water. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution and in Union law on water protection, it is necessary for the Commission to review the need to establish differentiated capacity thresholds for different poultry species in order to define the scope of this Directive and to review the need to establish the most suitable controls on emissions from cattle rearing installations.

(21) In order to take account of developments in best available techniques or other changes to an installation, permit conditions should be reconsidered regularly and, where necessary, updated, in particular where new or updated BAT conclusions are adopted.

(22) In specific cases where permit reconsideration and updating identifies that a longer period than 4 years after the publication of a decision on BAT conclusions might be needed to introduce new best available techniques, competent authorities may set a longer time period in permit conditions where this is justified on the basis of the criteria laid down in this Directive.

(23) It is necessary to ensure that the operation of an installation does not lead to a deterioration of the quality of soil and groundwater. Permit conditions should, therefore, include appropriate measures to prevent emissions to soil and groundwater and regular surveillance of those measures to avoid leaks, spills, incidents or accidents occurring during the use of equipment and during storage. In order to detect possible soil and groundwater pollution at an early stage and, therefore, to take appropriate corrective measures before the pollution spreads, the monitoring of soil and groundwater for relevant hazardous substances is also necessary. When determining the frequency of monitoring, the type of prevention measures and the extent and occurrence of their surveillance may be considered.

(24) In order to ensure that the operation of an installation does not deteriorate the quality of soil and groundwater, it is necessary to establish, through a baseline report, the state of soil and groundwater contamination. The baseline report should be a practical tool that permits, as far as possible, a quantified comparison between the state of the site described in that report and the state of the site upon definitive cessation of activities, in order to ascertain whether a significant increase in pollution of soil or groundwater has taken place. The baseline report should, therefore, contain information making use of existing data on soil and groundwater measurements and historical data related to past uses of the site.

(25) In accordance with the polluter pays principle, when assessing the level of significance of the pollution of soil and groundwater caused by the operator which would trigger the obligation to return the site to the state described in the baseline report, Member States should take into account the permit conditions that have applied over the lifetime of the activity concerned, the pollution prevention measures adopted for the installation, and the relative increase in pollution compared to the contamination load identified in the baseline report. Liability regarding pollution not caused by the operator is a matter for relevant national law and, where applicable, other relevant Union law.

(26) In order to ensure the effective implementation and enforcement of this Directive, operators should regularly report to the competent authority on compliance with permit conditions. Member States should ensure that the operator and the competent authority each take necessary measures in the event of non-compliance with this Directive and provide for a system of environmental inspections. Member States should ensure that sufficient staff are available with the skills and qualifications needed to carry out those inspections effectively.

(27) In accordance with the Århus Convention on access to information, public participation in decision-making and access to justice in environmental matters ([1]), effective public participation in decision-making is necessary to enable the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken. Members of the public concerned should have access to justice in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.

(28) The combustion of fuel in installations with a total rated thermal input below 50 MW contributes significantly to emissions of pollutants into the air. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution, it is necessary for the Commission to review the need to establish the most suitable controls on emissions from such installations. That review should take into account the specificities of combustion plants used in healthcare facilities, in particular with regard to their exceptional use in the case of emergencies.

(29) Large combustion plants contribute greatly to emissions of polluting substances into the air resulting in a significant impact on human health and the environment. In order to reduce that impact and to work towards meeting the requirements of Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants ([2]) and the objectives set out in the Thematic Strategy on Air Pollution, it is necessary to set more stringent emission limit values at Union level for certain categories of combustion plants and pollutants.

(30) The Commission should review the need to establish Union-wide emission limit values and to amend the emission limit values set out in Annex V for certain large combustion plants, taking into account the review and update of the relevant BAT reference documents. In this context, the Commission should consider the specificity of the energy systems of refineries.

(31) Due to the characteristics of certain indigenous solid fuels, it is appropriate to apply minimum desulphurisation rates rather than emission limit values for sulphur dioxide for combustion plants firing such fuels. Moreover, as the specific characteristics of oil shale may not allow the application of the same sulphur abatement techniques or the achievement of the same desulphurisation efficiency as for other fuels, a slightly lower minimum desulphurisation rate for plants using this fuel is appropriate.

(32) In the case of a sudden interruption in the supply of low-sulphur fuel or gas resulting from a serious shortage, the competent authority should be able to grant temporary derogations to allow emissions of the combustion plants concerned to exceed the emission limit values set out in this Directive.

([1]) OJ L 124, 17.5.2005, p. 4.

([2]) OJ L 309, 27.11.2001, p. 22.

(33) The operator concerned should not operate a combustion plant for more than 24 hours after malfunctioning or breakdown of abatement equipment and unabated operation should not exceed 120 hours in a 12-month period in order to limit the negative effects of pollution on the environment. However, where there is an overriding need for energy supplies or it is necessary to avoid an overall increase of emissions resulting from the operation of another combustion plant, competent authorities should be able to grant a derogation from those time limits.

(34) In order to ensure a high level of environmental and human health protection and to avoid transboundary movements of waste to plants operating at lower environmental standards, it is necessary to set and maintain stringent operating conditions, technical requirements and emission limit values for plants incinerating or co-incinerating waste within the Union.

(35) The use of organic solvents in certain activities and installations gives rise to emissions of organic compounds into the air which contribute to the local and transboundary formation of photochemical oxidants which causes damage to natural resources and has harmful effects on human health. It is, therefore, necessary to take preventive action against the use of organic solvents and to establish a requirement to comply with emission limit values for organic compounds and appropriate operating conditions. Operators should be allowed to comply with the requirements of a reduction scheme instead of complying with the emission limit values set out in this Directive where other measures, such as the use of low-solvent or solvent-free products or techniques, provide alternative means of achieving equivalent emission reduction.

(36) Installations producing titanium dioxide can give rise to significant pollution into air and water. In order to reduce these impacts, it is necessary to set at Union level more stringent emission limit values for certain polluting substances.

(37) With regard to the inclusion in the scope of national laws, regulations and administrative provisions brought into force in order to comply with this Directive of installations for the manufacturing of ceramic products by firings, on the basis of the characteristics of the national industrial sector, and in order to grant clear interpretation of the scope, Member States should decide whether to apply both the criteria, production capacity and kiln capacity, or just one of the two criteria.

(38) In order to simplify reporting and reduce unnecessary administrative burden, the Commission should identify methods to streamline the way in which data are made available pursuant to this Directive with the other requirements of Union law, and in particular Regulation (EC) No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register ([1]).

(39) In order to ensure uniform conditions for implementation, implementing powers should be conferred on the Commission to adopt guidance on the collection of data, on the drawing up of BAT reference documents and on their quality assurance, including the suitability of their content and format, to adopt decisions on BAT conclusions, to establish detailed rules on the determination of start-up and shut-down periods and for transitional national plans for large combustion plants, and to establish the type, format and frequency of information that Member States are to make available to the Commission. In accordance with Article 291 TFEU, rules and general principles concerning mechanisms for the control by Member States of the Commission's exercise of implementing powers are to be laid down in advance by a regulation adopted in accordance with the ordinary legislative procedure. Pending the adoption of that new regulation, Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ([2]) continues to apply, with the exception of the regulatory procedure with scrutiny, which is not applicable.

(40) The Commission should be empowered to adopt delegated acts in accordance with Article 290 TFEU in respect of the setting of the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out, and the adaptation of certain parts of Annexes V, VI and VII to scientific and technical progress. In the case of waste incineration plants and waste co-incineration plants, this may include, inter alia, the establishment of criteria to allow derogations from continuous monitoring of total dust emissions. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level.

(41) In order to address significant environmental pollution, for example from heavy metals and dioxins and furans, the Commission should, based on an assessment of the implementation of the best available techniques by certain activities or of the impact of those activities on the environment as a whole, present proposals for Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance.

(42) Member States should lay down rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.

([1]) OJ L 33, 4.2.2006, p. 1.

([2]) OJ L 184, 17.7.1999, p. 23.

(43) In order to provide existing installations with sufficient time to adapt technically to the new requirements of this Directive, some of the new requirements should apply to those installations after a fixed period from the date of application of this Directive. Combustion plants need sufficient time to install the necessary abatement measures to meet the emission limit values set out in Annex V.

(44) Since the objectives of this Directive, namely to ensure a high level of environmental protection and the improvement of environmental quality, cannot be sufficiently achieved by Member States and can, therefore, by reason of the transboundary nature of pollution from industrial activities, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(45) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union. In particular, this Directive seeks to promote the application of Article 37 of that Charter.

(46) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive change as compared with the earlier Directives. The obligation to transpose the provisions which are unchanged arises under the earlier Directives.

(47) In accordance with paragraph 34 of the Interinstitutional agreement on better law-making [1], Member States are encouraged to draw up, for themselves and in the interests of the Union, their own tables, which will as far as possible, illustrate the correlation between this Directive and the transposition measures, and to make those tables public.

(48) This Directive should be without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law and application of the Directives set out in Annex IX, Part B,

HAVE ADOPTED THIS DIRECTIVE:

CHAPTER I

COMMON PROVISIONS

Article 1

Subject matter

This Directive lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.

Article 2

Scope

1. This Directive shall apply to the industrial activities giving rise to pollution referred to in Chapters II to VI.

2. This Directive shall not apply to research activities, development activities or the testing of new products and processes.

Article 3

Definitions

For the purposes of this Directive the following definitions shall apply:

(1) 'substance' means any chemical element and its compounds, with the exception of the following substances:

(a) radioactive substances as defined in Article 1 of Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation [2];

(b) genetically modified micro-organisms as defined in Article 2(b) of Directive 2009/41/EC of the European Parliament and the Council of 6 May 2009 on the contained use of genetically modified micro-organisms [3];

(c) genetically modified organisms as defined in point 2 of Article 2 of Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms [4];

(2) 'pollution' means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment;

[1] OJ C 321, 31.12.2003, p. 1.

[2] OJ L 159, 29.6.1996, p. 1.

[3] OJ L 125, 21.5.2009, p. 75.

[4] OJ L 106, 17.4.2001, p. 1.

(3) 'installation' means a stationary technical unit within which one or more activities listed in Annex I or in Part 1 of Annex VII are carried out, and any other directly associated activities on the same site which have a technical connection with the activities listed in those Annexes and which could have an effect on emissions and pollution;

(4) 'emission' means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into air, water or land;

(5) 'emission limit value' means the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time;

(6) 'environmental quality standard' means the set of requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Union law;

(7) 'permit' means a written authorisation to operate all or part of an installation or combustion plant, waste incineration plant or waste co-incineration plant;

(8) 'general binding rules' means emission limit values or other conditions, at least at sector level, that are adopted with the intention of being used directly to set permit conditions;

(9) 'substantial change' means a change in the nature or functioning, or an extension, of an installation or combustion plant, waste incineration plant or waste co-incineration plant which may have significant negative effects on human health or the environment;

(10) 'best available techniques' means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:

(a) 'techniques' includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;

(b) 'available techniques' means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;

(c) 'best' means most effective in achieving a high general level of protection of the environment as a whole;

(11) 'BAT reference document' means a document, resulting from the exchange of information organised pursuant to Article 13, drawn up for defined activities and describing, in particular, applied techniques, present emissions and consumption levels, techniques considered for the determination of best available techniques as well as BAT conclusions and any emerging techniques, giving special consideration to the criteria listed in Annex III;

(12) 'BAT conclusions' means a document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures;

(13) 'emission levels associated with the best available techniques' means the range of emission levels obtained under normal operating conditions using a best available technique or a combination of best available techniques, as described in BAT conclusions, expressed as an average over a given period of time, under specified reference conditions;

(14) 'emerging technique' means a novel technique for an industrial activity that, if commercially developed, could provide either a higher general level of protection of the environment or at least the same level of protection of the environment and higher cost savings than existing best available techniques;

(15) 'operator' means any natural or legal person who operates or controls in whole or in part the installation or combustion plant, waste incineration plant or waste co-incineration plant or, where this is provided for in national law, to whom decisive economic power over the technical functioning of the installation or plant has been delegated;

(16) 'the public' means one or more natural or legal persons and, in accordance with national law or practice, their associations, organisations or groups;

(17) 'the public concerned' means the public affected or likely to be affected by, or having an interest in, the taking of a decision on the granting or the updating of a permit or of permit conditions; for the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest;

(18) 'hazardous substances' means substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures ([1]);

(19) 'baseline report' means information on the state of soil and groundwater contamination by relevant hazardous substances;

(20) 'groundwater' means groundwater as defined in point 2 of Article 2 of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ([2]);

(21) 'soil' means the top layer of the Earth's crust situated between the bedrock and the surface. The soil is composed of mineral particles, organic matter, water, air and living organisms;

(22) 'environmental inspection' means all actions, including site visits, monitoring of emissions and checks of internal reports and follow-up documents, verification of self-monitoring, checking of the techniques used and adequacy of the environment management of the installation, undertaken by or on behalf of the competent authority to check and promote compliance of installations with their permit conditions and, where necessary, to monitor their environmental impact;

(23) 'poultry' means poultry as defined in point 1 of Article 2 of Council Directive 90/539/EEC of 15 October 1990 on animal health conditions governing intra-Community trade in, and imports from third countries of, poultry and hatching eggs ([3]);

(24) 'fuel' means any solid, liquid or gaseous combustible material;

(25) 'combustion plant' means any technical apparatus in which fuels are oxidised in order to use the heat thus generated;

(26) 'stack' means a structure containing one or more flues providing a passage for waste gases in order to discharge them into the air;

(27) 'operating hours' means the time, expressed in hours, during which a combustion plant, in whole or in part, is operating and discharging emissions into the air, excluding start-up and shut-down periods;

(28) 'rate of desulphurisation' means the ratio over a given period of time of the quantity of sulphur which is not emitted into air by a combustion plant to the quantity of sulphur contained in the solid fuel which is introduced into the combustion plant facilities and which is used in the plant over the same period of time;

(29) 'indigenous solid fuel' means a naturally occurring solid fuel fired in a combustion plant specifically designed for that fuel and extracted locally;

(30) 'determinative fuel' means the fuel which, amongst all fuels used in a multi-fuel firing combustion plant using the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, has the highest emission limit value as set out in Part 1 of Annex V, or, in the case of several fuels having the same emission limit value, the fuel having the highest thermal input amongst those fuels;

(31) 'biomass' means any of the following:

(a) products consisting of any vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content;

(b) the following waste:

(i) vegetable waste from agriculture and forestry;

(ii) vegetable waste from the food processing industry, if the heat generated is recovered;

(iii) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered;

(iv) cork waste;

(v) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating and which includes, in particular, such wood waste originating from construction and demolition waste;

(32) 'multi-fuel firing combustion plant' means any combustion plant which may be fired simultaneously or alternately by two or more types of fuel;

(33) 'gas turbine' means any rotating machine which converts thermal energy into mechanical work, consisting mainly of a compressor, a thermal device in which fuel is oxidised in order to heat the working fluid, and a turbine;

(34) 'gas engine' means an internal combustion engine which operates according to the Otto cycle and uses spark ignition or, in case of dual fuel engines, compression ignition to burn fuel;

([1]) OJ L 353, 31.12.2008, p. 1.
([2]) OJ L 327, 22.12.2000, p. 1.
([3]) OJ L 303, 31.10.1990, p. 6.

(35) 'diesel engine' means an internal combustion engine which operates according to the diesel cycle and uses compression ignition to burn fuel;

(36) 'small isolated system' means a small isolated system as defined in point 26 of Article 2 of Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity [1];

(37) 'waste' means waste as defined in point 1 of Article 3 of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste [2];

(38) 'hazardous waste' means hazardous waste as defined in point 2 of Article 3 of Directive 2008/98/EC;

(39) 'mixed municipal waste' means waste from households as well as commercial, industrial and institutional waste which, because of its nature and composition, is similar to waste from households, but excluding fractions indicated under heading 20 01 of the Annex to Decision 2000/532/EC [3] that are collected separately at source and excluding the other waste indicated under heading 20 02 of that Annex;

(40) 'waste incineration plant' means any stationary or mobile technical unit and equipment dedicated to the thermal treatment of waste, with or without recovery of the combustion heat generated, through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated;

(41) 'waste co-incineration plant' means any stationary or mobile technical unit whose main purpose is the generation of energy or production of material products and which uses waste as a regular or additional fuel or in which waste is thermally treated for the purpose of disposal through the incineration by oxidation of waste as well as other thermal treatment processes, such as pyrolysis, gasification or plasma process, if the substances resulting from the treatment are subsequently incinerated;

(42) 'nominal capacity' means the sum of the incineration capacities of the furnaces of which a waste incineration plant or a waste co-incineration plant is composed, as specified by the constructor and confirmed by the operator, with due account being taken of the calorific value of the waste, expressed as the quantity of waste incinerated per hour;

(43) 'dioxins and furans' means all polychlorinated dibenzo-p-dioxins and dibenzofurans listed in Part 2 of Annex VI;

(44) 'organic compound' means any compound containing at least the element carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates;

(45) 'volatile organic compound' means any organic compound as well as the fraction of creosote, having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use;

(46) 'organic solvent' means any volatile organic compound which is used for any of the following:

(a) alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials;

(b) as a cleaning agent to dissolve contaminants;

(c) as a dissolver;

(d) as a dispersion medium;

(e) as a viscosity adjuster;

(f) as a surface tension adjuster;

(g) as a plasticiser;

(h) as a preservative;

(47) 'coating' means coating as defined in point 8 of Article 2 of Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products [4].

Article 4

Obligation to hold a permit

1. Member States shall take the necessary measures to ensure that no installation or combustion plant, waste incineration plant or waste co-incineration plant is operated without a permit.

By way of derogation from the first subparagraph, Member States may set a procedure for the registration of installations covered only by Chapter V.

The procedure for registration shall be specified in a binding act and include at least a notification to the competent authority by the operator of the intention to operate an installation.

[1] OJ L 176, 15.7.2003, p. 37.

[2] OJ L 312, 22.11.2008, p. 3.

[3] Commission Decision 2000/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (OJ L 226, 6.9.2000, p. 3).

[4] OJ L 143, 30.4.2004, p. 87.

2. Member States may opt to provide that a permit cover two or more installations or parts of installations operated by the same operator on the same site.

Where a permit covers two or more installations, it shall contain conditions to ensure that each installation complies with the requirements of this Directive.

3. Member States may opt to provide that a permit cover several parts of an installation operated by different operators. In such cases, the permit shall specify the responsibilities of each operator.

Article 5

Granting of a permit

1. Without prejudice to other requirements laid down in national or Union law, the competent authority shall grant a permit if the installation complies with the requirements of this Directive.

2. Member States shall take the measures necessary to ensure that the conditions of, and the procedures for the granting of, the permit are fully coordinated where more than one competent authority or more than one operator is involved or more than one permit is granted, in order to guarantee an effective integrated approach by all authorities competent for this procedure.

3. In the case of a new installation or a substantial change where Article 4 of Directive 85/337/EEC applies, any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6, 7 and 9 of that Directive shall be examined and used for the purposes of granting the permit.

Article 6

General binding rules

Without prejudice to the obligation to hold a permit, Member States may include requirements for certain categories of installations, combustion plants, waste incineration plants or waste co-incineration plants in general binding rules.

Where general binding rules are adopted, the permit may simply include a reference to such rules.

Article 7

Incidents and accidents

Without prejudice to Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage [1], in the event of any incident or accident significantly affecting the environment, Member States shall take the necessary measures to ensure that:

(a) the operator informs the competent authority immediately;

(b) the operator immediately takes the measures to limit the environmental consequences and to prevent further possible incidents or accidents;

(c) the competent authority requires the operator to take any appropriate complementary measures that the competent authority considers necessary to limit the environmental consequences and to prevent further possible incidents or accidents.

Article 8

Non-compliance

1. Member States shall take the necessary measures to ensure that the permit conditions are complied with.

2. In the event of a breach of the permit conditions, Member States shall ensure that:

(a) the operator immediately informs the competent authority;

(b) the operator immediately takes the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) the competent authority requires the operator to take any appropriate complementary measures that the competent authority considers necessary to restore compliance.

Where the breach of the permit conditions poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment, and until compliance is restored in accordance with points (b) and (c) of the first subparagraph, the operation of the installation, combustion plant, waste incineration plant, waste co-incineration plant or relevant part thereof shall be suspended.

Article 9

Emission of greenhouse gases

1. Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive 2003/87/EC in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas, unless necessary to ensure that no significant local pollution is caused.

2. For activities listed in Annex I to Directive 2003/87/EC, Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site.

[1] OJ L 143, 30.4.2004, p. 56.

3. Where necessary, the competent authorities shall amend the permit as appropriate.

4. Paragraphs 1 to 3 shall not apply to installations which are temporarily excluded from the scheme for greenhouse gas emission allowance trading within the Union in accordance with Article 27 of Directive 2003/87/EC.

CHAPTER II

PROVISIONS FOR ACTIVITIES LISTED IN ANNEX I

Article 10

Scope

This Chapter shall apply to the activities set out in Annex I and, where applicable, reaching the capacity thresholds set out in that Annex.

Article 11

General principles governing the basic obligations of the operator

Member States shall take the necessary measures to provide that installations are operated in accordance with the following principles:

(a) all the appropriate preventive measures are taken against pollution;

(b) the best available techniques are applied;

(c) no significant pollution is caused;

(d) the generation of waste is prevented in accordance with Directive 2008/98/EC;

(e) where waste is generated, it is, in order of priority and in accordance with Directive 2008/98/EC, prepared for re-use, recycled, recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;

(f) energy is used efficiently;

(g) the necessary measures are taken to prevent accidents and limit their consequences;

(h) the necessary measures are taken upon definitive cessation of activities to avoid any risk of pollution and return the site of operation to the satisfactory state defined in accordance with Article 22.

Article 12

Applications for permits

1. Member States shall take the necessary measures to ensure that an application for a permit includes a description of the following:

(a) the installation and its activities;

(b) the raw and auxiliary materials, other substances and the energy used in or generated by the installation;

(c) the sources of emissions from the installation;

(d) the conditions of the site of the installation;

(e) where applicable, a baseline report in accordance with Article 22(2);

(f) the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment;

(g) the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation;

(h) measures for the prevention, preparation for re-use, recycling and recovery of waste generated by the installation;

(i) further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 11;

(j) measures planned to monitor emissions into the environment;

(k) the main alternatives to the proposed technology, techniques and measures studied by the applicant in outline.

An application for a permit shall also include a non-technical summary of the details referred to in the first subparagraph.

2. Where information supplied in accordance with the requirements provided for in Directive 85/337/EEC or a safety report prepared in accordance with Directive 96/82/EC or other information produced in response to other legislation fulfils any of the requirements of paragraph 1, that information may be included in, or attached to, the application.

Article 13

BAT reference documents and exchange of information

1. In order to draw up, review and, where necessary, update BAT reference documents, the Commission shall organise an exchange of information between Member States, the industries concerned, non-governmental organisations promoting environmental protection and the Commission.

2. The exchange of information shall, in particular, address the following:

(a) the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste;

(b) the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein;

(c) best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b).

3. The Commission shall establish and regularly convene a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

The Commission shall obtain the opinion of the forum on the practical arrangements for the exchange of information and, in particular, on the following:

(a) the rules of procedure of the forum;

(b) the work programme for the exchange of information;

(c) guidance on the collection of data;

(d) guidance on the drawing up of BAT reference documents and on their quality assurance including the suitability of their content and format.

The guidance referred to in points (c) and (d) of the second subparagraph shall take account of the opinion of the forum and shall be adopted in accordance with the regulatory procedure referred to in Article 75(2).

4. The Commission shall obtain and make publicly available the opinion of the forum on the proposed content of the BAT reference documents and shall take into account this opinion for the procedures laid down in paragraph 5.

5. Decisions on the BAT conclusions shall be adopted in accordance with the regulatory procedure referred to in Article 75(2).

6. After the adoption of a decision in accordance with paragraph 5, the Commission shall without delay make the BAT reference document publicly available and ensure that BAT conclusions are made available in all the official languages of the Union.

7. Pending the adoption of a relevant decision in accordance with paragraph 5, the conclusions on best available techniques from BAT reference documents adopted by the Commission prior to the date referred to in Article 83 shall apply as BAT conclusions for the purposes of this Chapter except for Article 15(3) and (4).

Article 14

Permit conditions

1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 11 and 18.

Those measures shall include at least the following:

(a) emission limit values for polluting substances listed in Annex II, and for other polluting substances, which are likely to be emitted from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another;

(b) appropriate requirements ensuring protection of the soil and groundwater and measures concerning the monitoring and management of waste generated by the installation;

(c) suitable emission monitoring requirements specifying:

(i) measurement methodology, frequency and evaluation procedure; and

(ii) where Article 15(3)(b) is applied, that results of emission monitoring are available for the same periods of time and reference conditions as for the emission levels associated with the best available techniques;

(d) an obligation to supply the competent authority regularly, and at least annually, with:

(i) information on the basis of results of emission monitoring referred to in point (c) and other required data that enables the competent authority to verify compliance with the permit conditions; and

(ii) where Article 15(3)(b) is applied, a summary of the results of emission monitoring which allows a comparison with the emission levels associated with the best available techniques;

(e) appropriate requirements for the regular maintenance and surveillance of measures taken to prevent emissions to soil and groundwater pursuant to point (b) and appropriate requirements concerning the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site and having regard to the possibility of soil and groundwater contamination at the site of the installation;

(f) measures relating to conditions other than normal operating conditions such as start-up and shut-down operations, leaks, malfunctions, momentary stoppages and definitive cessation of operations;

(g) provisions on the minimisation of long-distance or transboundary pollution;

(h) conditions for assessing compliance with the emission limit values or a reference to the applicable requirements specified elsewhere.

2. For the purpose of paragraph 1(a), emission limit values may be supplemented or replaced by equivalent parameters or technical measures ensuring an equivalent level of environmental protection.

3. BAT conclusions shall be the reference for setting the permit conditions.

4. Without prejudice to Article 18, the competent authority may set stricter permit conditions than those achievable by the use of the best available techniques as described in the BAT conclusions. Member States may establish rules under which the competent authority may set such stricter conditions.

5. Where the competent authority sets permit conditions on the basis of a best available technique not described in any of the relevant BAT conclusions, it shall ensure that:

(a) that technique is determined by giving special consideration to the criteria listed in Annex III; and

(b) the requirements of Article 15 are complied with.

Where the BAT conclusions referred to in the first subparagraph do not contain emission levels associated with the best available techniques, the competent authority shall ensure that the technique referred to in the first subparagraph ensures a level of environmental protection equivalent to the best available techniques described in the BAT conclusions.

6. Where an activity or a type of production process carried out within an installation is not covered by any of the BAT conclusions or where those conclusions do not address all the potential environmental effects of the activity or process, the competent authority shall, after prior consultations with the operator, set the permit conditions on the basis of the best available techniques that it has determined for the activities or processes concerned, by giving special consideration to the criteria listed in Annex III.

7. For installations referred to in point 6.6 of Annex I, paragraphs 1 to 6 of this Article shall apply without prejudice to the legislation relating to animal welfare.

Article 15

Emission limit values, equivalent parameters and technical measures

1. The emission limit values for polluting substances shall apply at the point where the emissions leave the installation, and any dilution prior to that point shall be disregarded when determining those values.

With regard to indirect releases of polluting substances into water, the effect of a water treatment plant may be taken into account when determining the emission limit values of the installation concerned, provided that an equivalent level of protection of the environment as a whole is guaranteed and provided this does not lead to higher levels of pollution in the environment.

2. Without prejudice to Article 18, the emission limit values and the equivalent parameters and technical measures referred to in Article 14(1) and (2) shall be based on the best available techniques, without prescribing the use of any technique or specific technology.

3. The competent authority shall set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) through either of the following:

(a) setting emission limit values that do not exceed the emission levels associated with the best available techniques. Those emission limit values shall be expressed for the same or shorter periods of time and under the same reference conditions as those emission levels associated with the best available techniques; or

(b) setting different emission limit values than those referred to under point (a) in terms of values, periods of time and reference conditions.

Where point (b) is applied, the competent authority shall, at least annually, assess the results of emission monitoring in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with the best available techniques.

4. By way of derogation from paragraph 3, and without prejudice to Article 18, the competent authority may, in specific cases, set less strict emission limit values. Such a derogation may apply only where an assessment shows that the achievement of emission levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to:

(a) the geographical location or the local environmental conditions of the installation concerned; or

(b) the technical characteristics of the installation concerned.

The competent authority shall document in an annex to the permit conditions the reasons for the application of the first subparagraph including the result of the assessment and the justification for the conditions imposed.

The emission limit values set in accordance with the first subparagraph shall, however, not exceed the emission limit values set out in the Annexes to this Directive, where applicable.

The competent authority shall in any case ensure that no significant pollution is caused and that a high level of protection of the environment as a whole is achieved.

On the basis of information provided by Member States in accordance with Article 72(1), in particular concerning the application of this paragraph, the Commission may, where necessary, assess and further clarify, through guidance, the criteria to be taken into account for the application of this paragraph.

The competent authority shall re-assess the application of the first subparagraph as part of each reconsideration of the permit conditions pursuant to Article 21.

5. The competent authority may grant temporary derogations from the requirements of paragraphs 2 and 3 of this Article and from Article 11(a) and (b) for the testing and use of emerging techniques for a total period of time not exceeding 9 months, provided that after the period specified, either the technique is stopped or the activity achieves at least the emission levels associated with the best available techniques.

Article 16

Monitoring requirements

1. The monitoring requirements referred to in Article 14(1)(c) shall, where applicable, be based on the conclusions on monitoring as described in the BAT conclusions.

2. The frequency of the periodic monitoring referred to in Article 14(1)(e) shall be determined by the competent authority in a permit for each individual installation or in general binding rules.

Without prejudice to the first subparagraph, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

Article 17

General binding rules for activities listed in Annex I

1. When adopting general binding rules, Member States shall ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions.

2. General binding rules shall be based on the best available techniques, without prescribing the use of any technique or specific technology in order to ensure compliance with Articles 14 and 15.

3. Member States shall ensure that general binding rules are updated to take into account developments in best available techniques and in order to ensure compliance with Article 21.

4. General binding rules adopted in accordance with paragraphs 1 to 3 shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication.

Article 18

Environmental quality standards

Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit, without prejudice to other measures which may be taken to comply with environmental quality standards.

Article 19

Developments in best available techniques

Member States shall ensure that the competent authority follows or is informed of developments in best available techniques and of the publication of any new or updated BAT conclusions and shall make that information available to the public concerned.

Article 20

Changes by operators to installations

1. Member States shall take the necessary measures to ensure that the operator informs the competent authority of any planned change in the nature or functioning, or an extension of the installation which may have consequences for the environment. Where appropriate, the competent authority shall update the permit.

2. Member States shall take the necessary measures to ensure that no substantial change planned by the operator is made without a permit granted in accordance with this Directive.

The application for a permit and the decision by the competent authority shall cover those parts of the installation and those details listed in Article 12 which may be affected by the substantial change.

3. Any change in the nature or functioning or an extension of an installation shall be deemed to be substantial if the change or extension in itself reaches the capacity thresholds set out in Annex I.

Article 21

Reconsideration and updating of permit conditions by the competent authority

1. Member States shall take the necessary measures to ensure that the competent authority periodically reconsiders in accordance with paragraphs 2 to 5 all permit conditions and, where necessary to ensure compliance with this Directive, updates those conditions.

2. At the request of the competent authority, the operator shall submit all the information necessary for the purpose of reconsidering the permit conditions, including, in particular, results of emission monitoring and other data, that enables a comparison of the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques.

When reconsidering permit conditions, the competent authority shall use any information resulting from monitoring or inspections.

3. Within 4 years of publication of decisions on BAT conclusions in accordance with Article 13(5) relating to the main activity of an installation, the competent authority shall ensure that:

(a) all the permit conditions for the installation concerned are reconsidered and, if necessary, updated to ensure compliance with this Directive, in particular, with Article 15(3) and (4), where applicable;

(b) the installation complies with those permit conditions.

The reconsideration shall take into account all the new or updated BAT conclusions applicable to the installation and adopted in accordance with Article 13(5) since the permit was granted or last reconsidered.

4. Where an installation is not covered by any of the BAT conclusions, the permit conditions shall be reconsidered and, if necessary, updated where developments in the best available techniques allow for the significant reduction of emissions.

5. The permit conditions shall be reconsidered and, where necessary, updated at least in the following cases:

(a) the pollution caused by the installation is of such significance that the existing emission limit values of the permit need to be revised or new such values need to be included in the permit;

(b) the operational safety requires other techniques to be used;

(c) where it is necessary to comply with a new or revised environmental quality standard in accordance with Article 18.

Article 22

Site closure

1. Without prejudice to Directive 2000/60/EC, Directive 2004/35/EC, Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration [1] and to relevant Union law on soil protection, the competent authority shall set permit conditions to ensure compliance with paragraphs 3 and 4 of this Article upon definitive cessation of activities.

2. Where the activity involves the use, production or release of relevant hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after 7 January 2013.

The baseline report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for under paragraph 3.

The baseline report shall contain at least the following information:

(a) information on the present use and, where available, on past uses of the site;

(b) where available, existing information on soil and groundwater measurements that reflect the state at the time the report is drawn up or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.

Where information produced pursuant to other national or Union law fulfils the requirements of this paragraph that information may be included in, or attached to, the submitted baseline report.

The Commission shall establish guidance on the content of the baseline report.

3. Upon definitive cessation of the activities, the operator shall assess the state of soil and groundwater contamination by relevant hazardous substances used, produced or released by the installation. Where the installation has caused significant pollution of soil or groundwater by relevant hazardous substances compared to the state established in the baseline report referred to in paragraph 2, the operator shall take the necessary measures to address that pollution so as to return the site to that state. For that purpose, the technical feasibility of such measures may be taken into account.

Without prejudice to the first subparagraph, upon definitive cessation of the activities, and where the contamination of soil and groundwater at the site poses a significant risk to human health or the environment as a result of the permitted activities carried out by the operator before the permit for the installation is updated for the first time after 7 January 2013 and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d), the operator shall take the necessary actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose such a risk.

[1] OJ L 372, 27.12.2006, p. 19.

4. Where the operator is not required to prepare a baseline report referred to in paragraph 2, the operator shall, upon definitive cessation of the activities, take the necessary actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose any significant risk to human health or the environment due to the contamination of soil and groundwater as a result of the permitted activities and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d).

Article 23

Environmental inspections

1. Member States shall set up a system of environmental inspections of installations addressing the examination of the full range of relevant environmental effects from the installations concerned.

Member States shall ensure that operators afford the competent authorities all necessary assistance to enable those authorities to carry out any site visits, to take samples and to gather any information necessary for the performance of their duties for the purposes of this Directive.

2. Member States shall ensure that all installations are covered by an environmental inspection plan at national, regional or local level and shall ensure that this plan is regularly reviewed and, where appropriate, updated.

3. Each environmental inspection plan shall include the following:

(a) a general assessment of relevant significant environmental issues;

(b) the geographical area covered by the inspection plan;

(c) a register of the installations covered by the plan;

(d) procedures for drawing up programmes for routine environmental inspections pursuant to paragraph 4;

(e) procedures for non-routine environmental inspections pursuant to paragraph 5;

(f) where necessary, provisions on the cooperation between different inspection authorities.

4. Based on the inspection plans, the competent authority shall regularly draw up programmes for routine environmental inspections, including the frequency of site visits for different types of installations.

The period between two site visits shall be based on a systematic appraisal of the environmental risks of the installations concerned and shall not exceed 1 year for installations posing the highest risks and 3 years for installations posing the lowest risks.

If an inspection has identified an important case of non-compliance with the permit conditions, an additional site visit shall be carried out within 6 months of that inspection.

The systematic appraisal of the environmental risks shall be based on at least the following criteria:

(a) the potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents;

(b) the record of compliance with permit conditions;

(c) the participation of the operator in the Union eco-management and audit scheme (EMAS), pursuant to Regulation (EC) No 1221/2009 [1].

The Commission may adopt guidance on the criteria for the appraisal of environmental risks.

5. Non-routine environmental inspections shall be carried out to investigate serious environmental complaints, serious environmental accidents, incidents and occurrences of non-compliance as soon as possible and, where appropriate, before the granting, reconsideration or update of a permit.

6. Following each site visit, the competent authority shall prepare a report describing the relevant findings regarding compliance of the installation with the permit conditions and conclusions on whether any further action is necessary.

The report shall be notified to the operator concerned within 2 months of the site visit taking place. The report shall be made publicly available by the competent authority in accordance with Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information [2] within 4 months of the site visit taking place.

Without prejudice to Article 8(2), the competent authority shall ensure that the operator takes all the necessary actions identified in the report within a reasonable period.

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[1] Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (OJ L 342, 22.12.2009, p. 1).

[2] OJ L 41, 14.2.2003, p. 26.

Article 24

Access to information and public participation in the permit procedure

1. Member States shall ensure that the public concerned are given early and effective opportunities to participate in the following procedures:

(a) the granting of a permit for new installations;

(b) the granting of a permit for any substantial change;

(c) the granting or updating of a permit for an installation where the application of Article 15(4) is proposed;

(d) the updating of a permit or permit conditions for an installation in accordance with Article 21(5)(a).

The procedure set out in Annex IV shall apply to such participation.

2. When a decision on granting, reconsideration or updating of a permit has been taken, the competent authority shall make available to the public, including via the Internet in relation to points (a), (b) and (f), the following information:

(a) the content of the decision, including a copy of the permit and any subsequent updates;

(b) the reasons on which the decision is based;

(c) the results of the consultations held before the decision was taken and an explanation of how they were taken into account in that decision;

(d) the title of the BAT reference documents relevant to the installation or activity concerned;

(e) how the permit conditions referred to in Article 14, including the emission limit values, have been determined in relation to the best available techniques and emission levels associated with the best available techniques;

(f) where a derogation is granted in accordance with Article 15(4), the specific reasons for that derogation based on the criteria laid down in that paragraph and the conditions imposed.

3. The competent authority shall also make available to the public, including via the Internet at least in relation to point (a):

(a) relevant information on the measures taken by the operator upon definitive cessation of activities in accordance with Article 22;

(b) the results of emission monitoring as required under the permit conditions and held by the competent authority.

4. Paragraphs 1, 2 and 3 of this Article shall apply subject to the restrictions laid down in Article 4(1) and (2) of Directive 2003/4/EC.

Article 25

Access to justice

1. Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to Article 24 when one of the following conditions is met:

(a) they have a sufficient interest;

(b) they maintain the impairment of a right, where administrative procedural law of a Member State requires this as a precondition.

2. Member States shall determine at what stage the decisions, acts or omissions may be challenged.

3. What constitutes a sufficient interest and impairment of a right shall be determined by Member States, consistently with the objective of giving the public concerned wide access to justice.

To this end, the interest of any non-governmental organisation promoting environmental protection and meeting any requirements under national law shall be deemed sufficient for the purpose of paragraph 1(a).

Such organisations shall also be deemed to have rights capable of being impaired for the purpose of paragraph 1(b).

4. Paragraphs 1, 2 and 3 shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

Any such procedure shall be fair, equitable, timely and not prohibitively expensive.

5. Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures.

Article 26

Transboundary effects

1. Where a Member State is aware that the operation of an installation is likely to have significant negative effects on the environment of another Member State, or where a Member State which is likely to be significantly affected so requests, the Member State in whose territory the application for a permit pursuant to Article 4 or Article 20(2) was submitted shall forward to the other Member State any information required to be given or made available pursuant to Annex IV at the same time as it makes it available to the public.

Such information shall serve as a basis for any consultations necessary in the framework of the bilateral relations between the two Member States on a reciprocal and equivalent basis.

2. Within the framework of their bilateral relations, Member States shall ensure that in the cases referred to in paragraph 1, the applications are also made available for an appropriate period of time to the public of the Member State likely to be affected so that it will have the right to comment on them before the competent authority reaches its decision.

3. The results of any consultations pursuant to paragraphs 1 and 2 shall be taken into consideration when the competent authority reaches a decision on the application.

4. The competent authority shall inform any Member State which has been consulted pursuant to paragraph 1 of the decision reached on the application and shall forward to it the information referred to in Article 24(2). That Member State shall take the measures necessary to ensure that that information is made available in an appropriate manner to the public concerned in its own territory.

Article 27

Emerging techniques

1. Member States shall, where appropriate, encourage the development and application of emerging techniques, in particular for those emerging techniques identified in BAT reference documents.

2. The Commission shall establish guidance to assist Member States in encouraging the development and application of emerging techniques as referred to in paragraph 1.

CHAPTER III

SPECIAL PROVISIONS FOR COMBUSTION PLANTS

Article 28

Scope

This Chapter shall apply to combustion plants, the total rated thermal input of which is equal to or greater than 50 MW, irrespective of the type of fuel used.

This Chapter shall not apply to the following combustion plants:

(a) plants in which the products of combustion are used for the direct heating, drying, or any other treatment of objects or materials;

(b) post-combustion plants designed to purify the waste gases by combustion which are not operated as independent combustion plants;

(c) facilities for the regeneration of catalytic cracking catalysts;

(d) facilities for the conversion of hydrogen sulphide into sulphur;

(e) reactors used in the chemical industry;

(f) coke battery furnaces;

(g) cowpers;

(h) any technical apparatus used in the propulsion of a vehicle, ship or aircraft;

(i) gas turbines and gas engines used on offshore platforms;

(j) plants which use any solid or liquid waste as a fuel other than waste referred to in point (b) of point 31 of Article 3.

Article 29

Aggregation rules

1. Where the waste gases of two or more separate combustion plants are discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant and their capacities added for the purpose of calculating the total rated thermal input.

2. Where two or more separate combustion plants which have been granted a permit for the first time on or after 1 July 1987, or the operators of which have submitted a complete application for a permit on or after that date, are installed in such a way that, taking technical and economic factors into account, their waste gases could in the judgement of the competent authority, be discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant and their capacities added for the purpose of calculating the total rated thermal input.

3. For the purpose of calculating the total rated thermal input of a combination of combustion plants referred to in paragraphs 1 and 2, individual combustion plants with a rated thermal input below 15 MW shall not be considered.

Article 30

Emission limit values

1. Waste gases from combustion plants shall be discharged in a controlled way by means of a stack, containing one or more flues, the height of which is calculated in such a way as to safeguard human health and the environment.

2. All permits for installations containing combustion plants which have been granted a permit before 7 January 2013, or the operators of which have submitted a complete application for a permit before that date, provided that such plants are put into operation no later than 7 January 2014, shall include conditions ensuring that emissions into air from these plants do not exceed the emission limit values set out in Part 1 of Annex V.

All permits for installations containing combustion plants which had been granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC and which are in operation after 1 January 2016, shall include conditions ensuring that emissions into the air from these plants do not exceed the emission limit values set out in Part 2 of Annex V.

3. All permits for installations containing combustion plants not covered by paragraph 2 shall include conditions ensuring that emissions into the air from these plants do not exceed the emission limit values set out in Part 2 of Annex V.

4. The emission limit values set out in Parts 1 and 2 of Annex V as well as the minimum rates of desulphurisation set out in Part 5 of that Annex shall apply to the emissions of each common stack in relation to the total rated thermal input of the entire combustion plant. Where Annex V provides that emission limit values may be applied for a part of a combustion plant with a limited number of operating hours, those limit values shall apply to the emissions of that part of the plant, but shall be set in relation to the total rated thermal input of the entire combustion plant.

5. The competent authority may grant a derogation for a maximum of 6 months from the obligation to comply with the emission limit values provided for in paragraphs 2 and 3 for sulphur dioxide in respect of a combustion plant which to this end normally uses low-sulphur fuel, in cases where the operator is unable to comply with those limit values because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

Member States shall immediately inform the Commission of any derogation granted under the first subparagraph.

6. The competent authority may grant a derogation from the obligation to comply with the emission limit values provided for in paragraphs 2 and 3 in cases where a combustion plant using only gaseous fuel has to resort exceptionally to the use of other fuels because of a sudden interruption in the supply of gas and for this reason would need to be equipped with a waste gas purification facility. The period for which such a derogation is granted shall not exceed 10 days except where there is an overriding need to maintain energy supplies.

The operator shall immediately inform the competent authority of each specific case referred to in the first subparagraph.

Member States shall inform the Commission immediately of any derogation granted under the first subparagraph.

7. Where a combustion plant is extended, the emission limit values set out in Part 2 of Annex V shall apply to the extended part of the plant affected by the change and shall be set in relation to the total rated thermal input of the entire combustion plant. In the case of a change to a combustion plant, which may have consequences for the environment and which affects a part of the plant with a rated thermal input of 50 MW or more, the emission limit values as set out in Part 2 of Annex V shall apply to the part of the plant which has changed in relation to the total rated thermal input of the entire combustion plant.

8. The emission limit values set out in Parts 1 and 2 of Annex V shall not apply to the following combustion plants:

(a) diesel engines;

(b) recovery boilers within installations for the production of pulp.

9. For the following combustion plants, on the basis of the best available techniques, the Commission shall review the need to establish Union-wide emission limit values and to amend the emission limit values set out in Annex V:

(a) the combustion plants referred to in paragraph 8;

(b) combustion plants within refineries firing the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, taking into account the specificity of the energy systems of refineries;

(c) combustion plants firing gases other than natural gas;

(d) combustion plants in chemical installations using liquid production residues as non-commercial fuel for own consumption.

The Commission shall, by 31 December 2013, report the results of this review to the European Parliament and to the Council accompanied, if appropriate, by a legislative proposal.

Article 31

Desulphurisation rate

1. For combustion plants firing indigenous solid fuel, which cannot comply with the emission limit values for sulphur dioxide referred to in Article 30(2) and (3) due to the characteristics of this fuel, Member States may apply instead the minimum rates of desulphurisation set out in Part 5 of Annex V, in accordance with the compliance rules set out in Part 6 of that Annex and with prior validation by the competent authority of the technical report referred to in Article 72(4)(a).

2. For combustion plants firing indigenous solid fuel, which co-incinerate waste, and which cannot comply with the C_{proc} values for sulphur dioxide set out in points 3.1 or 3.2 of Part 4 of Annex VI due to the characteristics of the indigenous solid fuel, Member States may apply instead the minimum rates of desulphurisation set out in Part 5 of Annex V, in accordance with the compliance rules set out in Part 6 of that Annex. If Member States choose to apply this paragraph, C_{waste} as referred to in point 1 of Part 4 of Annex VI shall be equal to 0 mg/Nm^3.

3. The Commission shall, by 31 December 2019, review the possibility of applying minimum rates of desulphurisation set out in Part 5 of Annex V, taking into account, in particular, the best available techniques and benefits obtained from reduced sulphur dioxide emissions.

Article 32

Transitional National Plan

1. During the period from 1 January 2016 to 30 June 2020, Member States may draw up and implement a transitional national plan covering combustion plants which were granted the first permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003. For each of the combustion plants covered by the plan, the plan shall cover emissions of one or more of the following pollutants: nitrogen oxides, sulphur dioxide and dust. For gas turbines, only nitrogen oxides emissions shall be covered by the plan.

The transitional national plan shall not include any of the following combustion plants:

(a) those to which Article 33(1) applies;

(b) those within refineries firing low calorific gases from the gasification of refinery residues or the distillation and conversion residues from the refining of crude oil for own consumption, alone or with other fuels;

(c) those to which Article 35 applies;

(d) those which are granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC.

2. Combustion plants covered by the plan may be exempted from compliance with the emission limit values referred to in Article 30(2) for the pollutants which are subject to the plan or, where applicable, with the rates of desulphurisation referred to in Article 31.

The emission limit values for sulphur dioxide, nitrogen oxides and dust set out in the permit for the combustion plant applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained.

Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V.

3. For each of the pollutants it covers, the transitional national plan shall set a ceiling defining the maximum total annual emissions for all of the plants covered by the plan on the basis of each plant's total rated thermal input on 31 December 2010, its actual annual operating hours and its fuel use, averaged over the last 10 years of operation up to and including 2010.

The ceiling for the year 2016 shall be calculated on the basis of the relevant emission limit values set out in Annexes III to VII to Directive 2001/80/EC or, where applicable, on the basis of the rates of desulphurisation set out in Annex III to Directive 2001/80/EC. In the case of gas turbines, the emission limit values for nitrogen oxides set out for such plants in Part B of Annex VI to Directive 2001/80/EC shall be used. The ceilings for the years 2019 and 2020 shall be calculated on the basis of the relevant emission limit values set out in Part 1 of Annex V to this Directive or, where applicable, the relevant rates of desulphurisation set out in Part 5 of Annex V to this Directive. The ceilings for the years 2017 and 2018 shall be set providing a linear decrease of the ceilings between 2016 and 2019.

Where a plant included in the transitional national plan is closed or no longer falls within the scope of Chapter III, this shall not result in an increase in total annual emissions from the remaining plants covered by the plan.

4. The transitional national plan shall also contain provisions on monitoring and reporting that comply with the implementing rules established in accordance with Article 41(b), as well as the measures foreseen for each of the plants in order to ensure timely compliance with the emission limit values that will apply from 1 July 2020.

5. Not later than 1 January 2013, Member States shall communicate their transitional national plans to the Commission.

The Commission shall evaluate the plans and, where the Commission has raised no objections within 12 months of receipt of a plan, the Member State concerned shall consider its plan to be accepted.

When the Commission considers a plan not to be in accordance with the implementing rules established in accordance with Article 41(b), it shall inform the Member State concerned that its plan cannot be accepted. In relation to the evaluation of a new version of a plan which a Member State communicates to the Commission, the time period referred to in the second subparagraph shall be 6 months.

6. Member States shall inform the Commission of any subsequent changes to the plan.

Article 33

Limited life time derogation

1. During the period from 1 January 2016 to 31 December 2023, combustion plants may be exempted from compliance with the emission limit values referred to in Article 30(2) and with the rates of desulphurisation referred to in Article 31, where applicable, and from their inclusion in the transitional national plan referred to in Article 32 provided that the following conditions are fulfilled:

(a) the operator of the combustion plant undertakes, in a written declaration submitted by 1 January 2014 at the latest to the competent authority, not to operate the plant for more than 17 500 operating hours, starting from 1 January 2016 and ending no later than 31 December 2023;

(b) the operator is required to submit each year to the competent authority a record of the number of operating hours since 1 January 2016;

(c) the emission limit values for sulphur dioxides, nitrogen oxides and dust set out in the permit for the combustion plant applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained during the remaining operational life of the combustion plant. Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V; and

(d) the combustion plant has not been granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC.

2. At the latest on 1 January 2016, each Member State shall communicate to the Commission a list of any combustion plants to which paragraph 1 applies, including their total rated thermal input, the fuel types used and the applicable emission limit values for sulphur dioxide, nitrogen oxides and dust. For plants subject to paragraph 1, Member States shall communicate annually to the Commission a record of the number of operating hours since 1 January 2016.

3. In case of a combustion plant being, on 6 January 2011, part of a small isolated system and accounting at that date for at least 35 % of the electricity supply within that system, which is unable, due to its technical characteristics, to comply with the emission limit values referred to in Article 30(2), the number of operating hours referred to in paragraph 1(a) of this Article shall be 18 000, starting from 1 January 2020 and ending no later than 31 December 2023, and the date referred to in paragraph 1(b) and paragraph 2 of this Article shall be 1 January 2020.

4. In case of a combustion plant with a total rated thermal input of more than 1 500 MW which started operating before 31 December 1986 and fires indigenous solid fuel with a net calorific value of less than 5 800 kJ/kg, a moisture content greater than 45 % by weight, a combined moisture and ash content greater than 60 % by weight and a calcium oxide content in ash greater than 10 %, the number of operating hours referred to in paragraph 1(a) shall be 32 000.

Article 34

Small isolated systems

1. Until 31 December 2019, combustion plants being, on 6 January 2011, part of a small isolated system may be exempted from compliance with the emission limit values referred to in Article 30(2) and the rates of desulphurisation referred to in Article 31, where applicable. Until 31 December 2019, the emission limit values set out in the permits of these combustion plants, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained.

2. Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V.

3. Where there are, on the territory of a Member State combustion plants covered by this Chapter that are part of a small isolated system, that Member State shall report to the Commission before 7 January 2013 a list of those combustion plants, the total annual energy consumption of the small isolated system and the amount of energy obtained through interconnection with other systems.

Article 35

District heating plants

1. Until 31 December 2022, a combustion plant may be exempted from compliance with the emission limit values referred to in Article 30(2) and the rates of desulphurisation referred to in Article 31 provided that the following conditions are fulfilled:

(a) the total rated thermal input of the combustion plant does not exceed 200 MW;

(b) the plant was granted a first permit before 27 November 2002 or the operator of that plant had submitted a complete application for a permit before that date, provided that it was put into operation no later than 27 November 2003;

(c) at least 50 % of the useful heat production of the plant, as a rolling average over a period of 5 years, is delivered in the form of steam or hot water to a public network for district heating; and

(d) the emission limit values for sulphur dioxide, nitrogen oxides and dust set out in its permit applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, are at least maintained until 31 December 2022.

2. At the latest on 1 January 2016, each Member State shall communicate to the Commission a list of any combustion plants to which paragraph 1 applies, including their total rated thermal input, the fuel types used and the applicable emission limit values for sulphur dioxide, nitrogen oxides and dust. In addition, Member States shall, for any combustion plants to which paragraph 1 applies and during the period mentioned in that paragraph, inform the Commission annually of the proportion of useful heat production of each plant which was delivered in the form of steam or hot water to a public network for district heating, expressed as a rolling average over the preceding 5 years.

Article 36

Geological storage of carbon dioxide

1. Member States shall ensure that operators of all combustion plants with a rated electrical output of 300 megawatts or more for which the original construction licence or, in the absence of such a procedure, the original operating licence is granted after the entry into force of Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide [1], have assessed whether the following conditions are met:

(a) suitable storage sites are available,

(b) transport facilities are technically and economically feasible,

(c) it is technically and economically feasible to retrofit for carbon dioxide capture.

2. If the conditions laid down in paragraph 1 are met, the competent authority shall ensure that suitable space on the installation site for the equipment necessary to capture and compress carbon dioxide is set aside. The competent authority shall determine whether the conditions are met on the basis of the assessment referred to in paragraph 1 and other available information, particularly concerning the protection of the environment and human health.

Article 37

Malfunction or breakdown of the abatement equipment

1. Member States shall ensure that provision is made in the permits for procedures relating to malfunction or breakdown of the abatement equipment.

2. In the case of a breakdown, the competent authority shall require the operator to reduce or close down operations if a return to normal operation is not achieved within 24 hours, or to operate the plant using low polluting fuels.

The operator shall notify the competent authority within 48 hours after the malfunction or breakdown of the abatement equipment.

The cumulative duration of unabated operation shall not exceed 120 hours in any 12-month period.

The competent authority may grant a derogation from the time limits set out in the first and third subparagraphs in one of the following cases:

(a) there is an overriding need to maintain energy supplies;

(b) the combustion plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.

Article 38

Monitoring of emissions into air

1. Member States shall ensure that the monitoring of air polluting substances is carried out in accordance with Part 3 of Annex V.

2. The installation and functioning of the automated monitoring equipment shall be subject to control and to annual surveillance tests as set out in Part 3 of Annex V.

3. The competent authority shall determine the location of the sampling or measurement points to be used for the monitoring of emissions.

4. All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

Article 39

Compliance with emission limit values

The emission limit values for air shall be regarded as being complied with if the conditions set out in Part 4 of Annex V are fulfilled.

Article 40

Multi-fuel firing combustion plants

1. In the case of a multi-fuel firing combustion plant involving the simultaneous use of two or more fuels, the competent authority shall set the emission limit values in accordance with the following steps:

(a) taking the emission limit value relevant for each individual fuel and pollutant corresponding to the total rated thermal input of the entire combustion plant as set out in Parts 1 and 2 of Annex V;

(b) determining fuel-weighted emission limit values, which are obtained by multiplying the individual emission limit value referred to in point (a) by the thermal input delivered by each fuel, and dividing the product of multiplication by the sum of the thermal inputs delivered by all fuels,

(c) aggregating the fuel-weighted emission limit values.

[1] OJ L 140, 5.6.2009, p. 114.

2. In the case of multi-fuel firing combustion plants covered by Article 30(2), which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, the following emission limit values may be applied instead of the emission limit values set according to paragraph 1:

(a) where, during the operation of the combustion plant, the proportion contributed by the determinative fuel to the sum of the thermal inputs delivered by all fuels is 50 % or more, the emission limit value set in Part 1 of Annex V for the determinative fuel;

(b) where the proportion contributed by the determinative fuel to the sum of the thermal inputs delivered by all fuels is less than 50 %, the emission limit value determined in accordance with the following steps:

(i) taking the emission limit values set out in Part 1 of Annex V for each of the fuels used, corresponding to the total rated thermal input of the combustion plant;

(ii) calculating the emission limit value of the determinative fuel by multiplying the emission limit value, determined for that fuel according to point (i), by a factor of two, and subtracting from this product the emission limit value of the fuel used with the lowest emission limit value as set out in Part 1 of Annex V, corresponding to the total rated thermal input of the combustion plant;

(iii) determining the fuel-weighted emission limit value for each fuel used by multiplying the emission limit value determined under points (i) and (ii) by the thermal input of the fuel concerned and by dividing the product of this multiplication by the sum of the thermal inputs delivered by all fuels;

(iv) aggregating the fuel-weighted emission limit values determined under point (iii).

3. In the case of multi-fuel firing combustion plants covered by Article 30(2), which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, the average emission limit values for sulphur dioxide set out in Part 7 of Annex V may be applied instead of the emission limit values set according to paragraphs 1 or 2 of this Article.

Article 41

Implementing rules

Implementing rules shall be established concerning:

(a) the determination of the start-up and shut-down periods referred to in point 27 of Article 3 and in point 1 of Part 4 of Annex V; and

(b) the transitional national plans referred to in Article 32 and, in particular, the setting of emission ceilings and related monitoring and reporting.

Those implementing rules shall be adopted in accordance with the regulatory procedure referred to in Article 75(2). The Commission shall make appropriate proposals not later than 7 July 2011.

CHAPTER IV

SPECIAL PROVISIONS FOR WASTE INCINERATION PLANTS AND WASTE CO-INCINERATION PLANTS

Article 42

Scope

1. This Chapter shall apply to waste incineration plants and waste co-incineration plants which incinerate or co-incinerate solid or liquid waste.

This Chapter shall not apply to gasification or pyrolysis plants, if the gases resulting from this thermal treatment of waste are purified to such an extent that they are no longer a waste prior to their incineration and they can cause emissions no higher than those resulting from the burning of natural gas.

For the purposes of this Chapter, waste incineration plants and waste co-incineration plants shall include all incineration lines or co-incineration lines, waste reception, storage, on site pretreatment facilities, waste-, fuel- and air-supply systems, boilers, facilities for the treatment of waste gases, on-site facilities for treatment or storage of residues and waste water, stacks, devices and systems for controlling incineration or co-incineration operations, recording and monitoring incineration or co-incineration conditions.

If processes other than oxidation, such as pyrolysis, gasification or plasma process, are applied for the thermal treatment of waste, the waste incineration plant or waste co-incineration plant shall include both the thermal treatment process and the subsequent incineration process.

If waste co-incineration takes place in such a way that the main purpose of the plant is not the generation of energy or production of material products but rather the thermal treatment of waste, the plant shall be regarded as a waste incineration plant.

2. This Chapter shall not apply to the following plants:

(a) plants treating only the following wastes:

(i) waste listed in point (b) of point 31 of Article 3;

(ii) radioactive waste;

(iii) animal carcasses as regulated by Regulation (EC) No 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules concerning animal by-products not intended for human consumption [1];

[1] OJ L 273, 10.10.2002, p. 1.

(iv) waste resulting from the exploration for, and the exploitation of, oil and gas resources from off-shore installations and incinerated on board the installations;

(b) experimental plants used for research, development and testing in order to improve the incineration process and which treat less than 50 tonnes of waste per year.

Article 43

Definition of residue

For the purposes of this Chapter, 'residue' shall mean any liquid or solid waste which is generated by a waste incineration plant or waste co-incineration plant.

Article 44

Applications for permits

An application for a permit for a waste incineration plant or waste co-incineration plant shall include a description of the measures which are envisaged to guarantee that the following requirements are met:

(a) the plant is designed, equipped and will be maintained and operated in such a manner that the requirements of this Chapter are met taking into account the categories of waste to be incinerated or co-incinerated;

(b) the heat generated during the incineration and co-incineration process is recovered as far as practicable through the generation of heat, steam or power;

(c) the residues will be minimised in their amount and harmfulness and recycled where appropriate;

(d) the disposal of the residues which cannot be prevented, reduced or recycled will be carried out in conformity with national and Union law.

Article 45

Permit conditions

1. The permit shall include the following:

(a) a list of all types of waste which may be treated using at least the types of waste set out in the European Waste List established by Decision 2000/532/EC, if possible, and containing information on the quantity of each type of waste, where appropriate;

(b) the total waste incinerating or co-incinerating capacity of the plant;

(c) the limit values for emissions into air and water;

(d) the requirements for the pH, temperature and flow of waste water discharges;

(e) the sampling and measurement procedures and frequencies to be used to comply with the conditions set for emission monitoring;

(f) the maximum permissible period of any technically unavoidable stoppages, disturbances, or failures of the purification devices or the measurement devices, during which the emissions into the air and the discharges of waste water may exceed the prescribed emission limit values.

2. In addition to the requirements set out in paragraph 1, the permit granted to a waste incineration plant or waste co-incineration plant using hazardous waste shall include the following:

(a) a list of the quantities of the different categories of hazardous waste which may be treated;

(b) the minimum and maximum mass flows of those hazardous wastes, their lowest and maximum calorific values and their maximum contents of polychlorinated biphenyls, pentachlorophenol, chlorine, fluorine, sulphur, heavy metals and other polluting substances.

3. Member States may list the categories of waste to be included in the permit which can be co-incinerated in certain categories of waste co-incineration plants.

4. The competent authority shall periodically reconsider and, where necessary, update permit conditions.

Article 46

Control of emissions

1. Waste gases from waste incineration plants and waste co-incineration plants shall be discharged in a controlled way by means of a stack the height of which is calculated in such a way as to safeguard human health and the environment.

2. Emissions into air from waste incineration plants and waste co-incineration plants shall not exceed the emission limit values set out in parts 3 and 4 of Annex VI or determined in accordance with Part 4 of that Annex.

If in a waste co-incineration plant more than 40 % of the resulting heat release comes from hazardous waste, or the plant co-incinerates untreated mixed municipal waste, the emission limit values set out in Part 3 of Annex VI shall apply.

3. Discharges to the aquatic environment of waste water resulting from the cleaning of waste gases shall be limited as far as practicable and the concentrations of polluting substances shall not exceed the emission limit values set out in Part 5 of Annex VI.

4. The emission limit values shall apply at the point where waste waters from the cleaning of waste gases are discharged from the waste incineration plant or waste co-incineration plant.

When waste waters from the cleaning of waste gases are treated outside the waste incineration plant or waste co-incineration plant at a treatment plant intended only for the treatment of this sort of waste water, the emission limit values set out in Part 5 of Annex VI shall be applied at the point where the waste waters leave the treatment plant. Where the waste water from the cleaning of waste gases is treated collectively with other sources of waste water, either on site or off site, the operator shall make the appropriate mass balance calculations, using the results of the measurements set out in point 2 of Part 6 of Annex VI in order to determine the emission levels in the final waste water discharge that can be attributed to the waste water arising from the cleaning of waste gases.

Under no circumstances shall dilution of waste water take place for the purpose of complying with the emission limit values set out in Part 5 of Annex VI.

5. Waste incineration plant sites and waste co-incineration plant sites, including associated storage areas for waste, shall be designed and operated in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater.

Storage capacity shall be provided for contaminated rainwater run-off from the waste incineration plant site or waste co-incineration plant site or for contaminated water arising from spillage or fire-fighting operations. The storage capacity shall be adequate to ensure that such waters can be tested and treated before discharge where necessary.

6. Without prejudice to Article 50(4)(c), the waste incineration plant or waste co-incineration plant or individual furnaces being part of a waste incineration plant or waste co-incineration plant shall under no circumstances continue to incinerate waste for a period of more than 4 hours uninterrupted where emission limit values are exceeded.

The cumulative duration of operation in such conditions over 1 year shall not exceed 60 hours.

The time limit set out in the second subparagraph shall apply to those furnaces which are linked to one single waste gas cleaning device.

Article 47

Breakdown

In the case of a breakdown, the operator shall reduce or close down operations as soon as practicable until normal operations can be restored.

Article 48

Monitoring of emissions

1. Member States shall ensure that the monitoring of emissions is carried out in accordance with Parts 6 and 7 of Annex VI.

2. The installation and functioning of the automated measuring systems shall be subject to control and to annual surveillance tests as set out in point 1 of Part 6 of Annex VI.

3. The competent authority shall determine the location of the sampling or measurement points to be used for monitoring of emissions.

4. All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

5. As soon as appropriate measurement techniques are available within the Union, the Commission shall, by means of delegated acts in accordance with Article 76 and subject to the conditions laid down in Articles 77 and 78, set the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out.

Article 49

Compliance with emission limit values

The emission limit values for air and water shall be regarded as being complied with if the conditions described in Part 8 of Annex VI are fulfilled.

Article 50

Operating conditions

1. Waste incineration plants shall be operated in such a way as to achieve a level of incineration such that the total organic carbon content of slag and bottom ashes is less than 3 % or their loss on ignition is less than 5 % of the dry weight of the material. If necessary, waste pre-treatment techniques shall be used.

2. Waste incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the incineration of waste is raised, after the last injection of combustion air, in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of at least 850 °C for at least two seconds.

Waste co-incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of at least 850 °C for at least two seconds.

If hazardous waste with a content of more than 1 % of halogenated organic substances, expressed as chlorine, is incinerated or co-incinerated, the temperature required to comply with the first and second subparagraphs shall be at least 1 100 °C.

In waste incineration plants, the temperatures set out in the first and third subparagraphs shall be measured near the inner wall of the combustion chamber. The competent authority may authorise the measurements at another representative point of the combustion chamber.

3. Each combustion chamber of a waste incineration plant shall be equipped with at least one auxiliary burner. This burner shall be switched on automatically when the temperature of the combustion gases after the last injection of combustion air falls below the temperatures set out in paragraph 2. It shall also be used during plant start-up and shut-down operations in order to ensure that those temperatures are maintained at all times during these operations and as long as unburned waste is in the combustion chamber.

The auxiliary burner shall not be fed with fuels which can cause higher emissions than those resulting from the burning of gas oil as defined in Article 2(2) of Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels [1], liquefied gas or natural gas.

4. Waste incineration plants and waste co-incineration plants shall operate an automatic system to prevent waste feed in the following situations:

(a) at start-up, until the temperature set out in paragraph 2 of this Article or the temperature specified in accordance with Article 51(1) has been reached;

(b) whenever the temperature set out in paragraph 2 of this Article or the temperature specified in accordance with Article 51(1) is not maintained;

(c) whenever the continuous measurements show that any emission limit value is exceeded due to disturbances or failures of the waste gas cleaning devices.

5. Any heat generated by waste incineration plants or waste co-incineration plants shall be recovered as far as practicable.

6. Infectious clinical waste shall be placed straight in the furnace, without first being mixed with other categories of waste and without direct handling.

7. Member States shall ensure that the waste incineration plant or waste co-incineration plant is operated and controlled by a natural person who is competent to manage the plant.

[1] OJ L 121, 11.5.1999, p. 13.

Article 51

Authorisation to change operating conditions

1. Conditions different from those laid down in Article 50(1), (2) and (3) and, as regards the temperature, paragraph 4 of that Article and specified in the permit for certain categories of waste or for certain thermal processes, may be authorised by the competent authority provided the other requirements of this Chapter are met. Member States may lay down rules governing these authorisations.

2. For waste incineration plants, the change of the operating conditions shall not cause more residues or residues with a higher content of organic polluting substances compared to those residues which could be expected under the conditions laid down in Article 50(1), (2) and (3).

3. Emissions of total organic carbon and carbon monoxide from waste co-incineration plants, authorised to change operating conditions according to paragraph 1 shall also comply with the emission limit values set out in Part 3 of Annex VI.

Emissions of total organic carbon from bark boilers within the pulp and paper industry co-incinerating waste at the place of its production which were in operation and had a permit before 28 December 2002 and which are authorised to change operating conditions according to paragraph 1 shall also comply with the emission limit values set out in Part 3 of Annex VI.

4. Member States shall communicate to the Commission all operating conditions authorised under paragraphs 1, 2 and 3 and the results of verifications made as part of the information provided in accordance with the reporting requirements under Article 72.

Article 52

Delivery and reception of waste

1. The operator of the waste incineration plant or waste co-incineration plant shall take all necessary precautions concerning the delivery and reception of waste in order to prevent or to limit as far as practicable the pollution of air, soil, surface water and groundwater as well as other negative effects on the environment, odours and noise, and direct risks to human health.

2. The operator shall determine the mass of each type of waste, if possible according to the European Waste List established by Decision 2000/532/EC, prior to accepting the waste at the waste incineration plant or waste co-incineration plant.

3. Prior to accepting hazardous waste at the waste incineration plant or waste co-incineration plant, the operator shall collect available information about the waste for the purpose of verifying compliance with the permit requirements specified in Article 45(2).

That information shall cover the following:

(a) all the administrative information on the generating process contained in the documents mentioned in paragraph 4(a);

(b) the physical, and as far as practicable, chemical composition of the waste and all other information necessary to evaluate its suitability for the intended incineration process;

(c) the hazardous characteristics of the waste, the substances with which it cannot be mixed, and the precautions to be taken in handling the waste.

4. Prior to accepting hazardous waste at the waste incineration plant or waste co-incineration plant, at least the following procedures shall be carried out by the operator:

(a) the checking of the documents required by Directive 2008/98/EC and, where applicable, those required by Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste [1] and by legislation on transport of dangerous goods;

(b) the taking of representative samples, unless inappropriate as far as possible before unloading, to verify conformity with the information provided for in paragraph 3 by carrying out controls and to enable the competent authorities to identify the nature of the wastes treated.

The samples referred to in point (b) shall be kept for at least 1 month after the incineration or co-incineration of the waste concerned.

5. The competent authority may grant exemptions from paragraphs 2, 3 and 4 to waste incineration plants or waste co-incineration plants which are a part of an installation covered by Chapter II and only incinerate or co-incinerate waste generated within that installation.

Article 53

Residues

1. Residues shall be minimised in their amount and harmfulness. Residues shall be recycled, where appropriate, directly in the plant or outside.

2. Transport and intermediate storage of dry residues in the form of dust shall take place in such a way as to prevent dispersal of those residues in the environment.

3. Prior to determining the routes for the disposal or recycling of the residues, appropriate tests shall be carried out to establish the physical and chemical characteristics and the polluting potential of the residues. Those tests shall concern the total soluble fraction and heavy metals soluble fraction.

Article 54

Substantial change

A change of operation of a waste incineration plant or a waste co-incineration plant treating only non-hazardous waste in an installation covered by Chapter II which involves the incineration or co-incineration of hazardous waste shall be regarded as a substantial change.

Article 55

Reporting and public information on waste incineration plants and waste co-incineration plants

1. Applications for new permits for waste incineration plants and waste co-incineration plants shall be made available to the public at one or more locations for an appropriate period to enable the public to comment on the applications before the competent authority reaches a decision. That decision, including at least a copy of the permit, and any subsequent updates, shall also be made available to the public.

2. For waste incineration plants or waste co-incineration plants with a nominal capacity of 2 tonnes or more per hour, the report referred to in Article 72 shall include information on the functioning and monitoring of the plant and give account of the running of the incineration or co-incineration process and the level of emissions into air and water in comparison with the emission limit values. That information shall be made available to the public.

3. A list of waste incineration plants or waste co-incineration plants with a nominal capacity of less than 2 tonnes per hour shall be drawn up by the competent authority and shall be made available to the public.

CHAPTER V

SPECIAL PROVISIONS FOR INSTALLATIONS AND ACTIVITIES USING ORGANIC SOLVENTS

Article 56

Scope

This chapter shall apply to activities listed in Part 1 of Annex VII and, where applicable, reaching the consumption thresholds set out in Part 2 of that Annex.

[1] OJ L 190, 12.7.2006, p. 1.

Article 57

Definitions

For the purposes of this Chapter, the following definitions shall apply:

(1) 'existing installation' means an installation in operation on 29 March 1999 or which was granted a permit or registered before 1 April 2001 or the operator of which submitted a complete application for a permit before 1 April 2001, provided that that installation was put in operation no later than 1 April 2002;

(2) 'waste gases' means the final gaseous discharge containing volatile organic compounds or other pollutants from a stack or abatement equipment into air;

(3) 'fugitive emissions' means any emissions not in waste gases of volatile organic compounds into air, soil and water as well as solvents contained in any products, unless otherwise stated in Part 2 of Annex VII;

(4) 'total emissions' means the sum of fugitive emissions and emissions in waste gases;

(5) 'mixture' means mixture as defined in Article 3(2) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency [1],

(6) 'adhesive' means any mixture, including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used to adhere separate parts of a product;

(7) 'ink' means a mixture, including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used in a printing activity to impress text or images on to a surface;

(8) 'varnish' means a transparent coating;

(9) 'consumption' means the total input of organic solvents into an installation per calendar year, or any other 12-month period, less any volatile organic compounds that are recovered for re-use;

(10) 'input' means the quantity of organic solvents and their quantity in mixtures used when carrying out an activity, including the solvents recycled inside and outside the installation, and which are counted every time they are used to carry out the activity;

(11) 're-use' means the use of organic solvents recovered from an installation for any technical or commercial purpose and including use as a fuel but excluding the final disposal of such recovered organic solvent as waste;

(12) 'contained conditions' means conditions under which an installation is operated so that the volatile organic compounds released from the activity are collected and discharged in a controlled way either via a stack or abatement equipment and are, therefore, not entirely fugitive;

(13) 'start-up and shut-down operations' means operations excluding regularly oscillating activity phases whilst bringing an activity, an equipment item or a tank into or out of service or into or out of an idling state.

Article 58

Substitution of hazardous substances

Substances or mixtures which, because of their content of volatile organic compounds classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No 1272/2008, are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F, shall be replaced, as far as possible by less harmful substances or mixtures within the shortest possible time.

Article 59

Control of emissions

1. Member States shall take the necessary measures to ensure that each installation complies with either of the following:

(a) the emission of volatile organic compounds from installations shall not exceed the emission limit values in waste gases and the fugitive emission limit values, or the total emission limit values, and other requirements laid down in Parts 2 and 3 of Annex VII are complied with;

(b) the requirements of the reduction scheme set out in Part 5 of Annex VII provided that an equivalent emission reduction is achieved compared to that achieved through the application of the emission limit values referred to in point (a).

Member States shall report to the Commission in accordance with Article 72(1) on the progress in achieving the equivalent emission reduction referred to in point (b).

2. By way of derogation from paragraph 1(a), where the operator demonstrates to the competent authority that for an individual installation the emission limit value for fugitive emissions is not technically and economically feasible, the competent authority may allow emissions to exceed that emission limit value provided that significant risks to human health or the environment are not to be expected and that the operator demonstrates to the competent authority that the best available techniques are being used.

[1] OJ L 396, 30.12.2006, p. 1.

3. By way of derogation from paragraph 1, for coating activities covered by item 8 of the table in Part 2 of Annex VII which cannot be carried out under contained conditions, the competent authority may allow the emissions of the installation not to comply with the requirements set out in that paragraph if the operator demonstrates to the competent authority that such compliance is not technically and economically feasible and that the best available techniques are being used.

4. Member States shall report to the Commission on the derogations referred to in paragraphs 2 and 3 of this Article in accordance with Article 72(2).

5. The emissions of either volatile organic compounds which are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351, shall be controlled under contained conditions as far as technically and economically feasible to safeguard public health and the environment and shall not exceed the relevant emission limit values set out in Part 4 of Annex VII.

6. Installations where two or more activities are carried out, each of which exceeds the thresholds in Part 2 of Annex VII shall:

(a) as regards the substances specified in paragraph 5, meet the requirements of that paragraph for each activity individually;

(b) as regards all other substances, either:

(i) meet the requirements of paragraph 1 for each activity individually; or

(ii) have total emissions of volatile organic compounds not exceeding those which would have resulted had point (i) been applied.

7. All appropriate precautions shall be taken to minimise emissions of volatile organic compounds during start-up and shut-down operations.

Article 60

Monitoring of emissions

Member States shall, either by specification in the permit conditions or by general binding rules, ensure that measurements of emissions are carried out in accordance with Part 6 of Annex VII.

Article 61

Compliance with emission limit values

The emission limit values in waste gases shall be regarded as being complied with if the conditions set out in Part 8 of Annex VII are fulfilled.

Article 62

Reporting on compliance

The operator shall supply the competent authority, on request, with data enabling the competent authority to verify compliance with either of the following:

(a) emission limit values in waste gases, fugitive emission limit values and total emission limit values;

(b) the requirements of the reduction scheme under Part 5 of Annex VII;

(c) the derogations granted in accordance with Article 59(2) and (3).

This may include a solvent management plan prepared in accordance with Part 7 of Annex VII.

Article 63

Substantial change to existing installations

1. A change of the maximum mass input of organic solvents by an existing installation averaged over 1 day, where the installation is operated at its design output under conditions other than start-up and shut-down operations and maintenance of equipment, shall be considered as substantial if it leads to an increase of emissions of volatile organic compounds of more than:

(a) 25 % for an installation carrying out either activities which fall within the lower threshold band of items 1, 3, 4, 5, 8, 10, 13, 16 or 17 of the table in Part 2 of Annex VII or, activities which fall under one of the other items of Part 2 of Annex VII, and with a solvent consumption of less than 10 tonnes per year;

(b) 10 % for all other installations.

2. Where an existing installation undergoes a substantial change, or falls within the scope of this Directive for the first time following a substantial change, that part of the installation which undergoes the substantial change shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.

3. In case of a substantial change, the competent authority shall check compliance of the installation with the requirements of this Directive.

Article 64

Exchange of information on substitution of organic solvents

The Commission shall organise an exchange of information with the Member States, the industry concerned and non-governmental organisations promoting environmental protection on the use of organic solvents and their potential substitutes and techniques which have the least potential effects on air, water, soil, ecosystems and human health.

The exchange of information shall be organised on all of the following:

(a) fitness for use;

(b) potential effects on human health and occupational exposure in particular;

(c) potential effects on the environment;

(d) the economic consequences, in particular the costs and benefits of the options available.

Article 65

Access to information

1. The decision of the competent authority, including at least a copy of the permit, and any subsequent updates, shall be made available to the public.

The general binding rules applicable for installations and the list of installations subject to permitting and registration shall be made available to the public.

2. The results of the monitoring of emissions as required under Article 60 and held by the competent authority shall be made available to the public.

3. Paragraphs 1 and 2 of this Article shall apply, subject to the restrictions laid down in Article 4(1) and (2) of Directive 2003/4/EC.

CHAPTER VI

SPECIAL PROVISIONS FOR INSTALLATIONS PRODUCING TITANIUM DIOXIDE

Article 66

Scope

This Chapter shall apply to installations producing titanium dioxide.

Article 67

Prohibition of the disposal of waste

Member States shall prohibit the disposal of the following waste into any water body, sea or ocean:

(a) solid waste;

(b) the mother liquors arising from the filtration phase following hydrolysis of the titanyl sulphate solution from installations applying the sulphate process; including the acid waste associated with such liquors, containing overall more than 0,5 % free sulphuric acid and various heavy metals and including such mother liquors which have been diluted until they contain 0,5 % or less free sulphuric acid;

(c) waste from installations applying the chloride process containing more than 0,5 % free hydrochloric acid and various heavy metals, including such waste which has been diluted until it contains 0,5 % or less free hydrochloric acid;

(d) filtration salts, sludges and liquid waste arising from the treatment (concentration or neutralisation) of the waste mentioned under points (b) and (c) and containing various heavy metals, but not including neutralised and filtered or decanted waste containing only traces of heavy metals and which, before any dilution, has a pH value above 5,5.

Article 68

Control of emissions into water

Emissions from installations into water shall not exceed the emission limit values set out in Part 1 of Annex VIII.

Article 69

Prevention and control of emissions into air

1. The emission of acid droplets from installations shall be prevented.

2. Emissions into air from installations shall not exceed the emission limit values set out in Part 2 of Annex VIII.

Article 70

Monitoring of emissions

1. Member States shall ensure the monitoring of emissions into water in order to enable the competent authority to verify compliance with the permit conditions and Article 68.

2. Member States shall ensure the monitoring of emissions into air in order to enable the competent authority to verify compliance with the permit conditions and Article 69. Such monitoring shall include at least monitoring of emissions as set out in Part 3 of Annex VIII.

3. Monitoring shall be carried out in accordance with CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality.

CHAPTER VII

COMMITTEE, TRANSITIONAL AND FINAL PROVISIONS

Article 71

Competent authorities

Member States shall designate the competent authorities responsible for carrying out the obligations arising from this Directive.

Article 72

Reporting by Member States

1. Member States shall ensure that information is made available to the Commission on the implementation of this Directive, on representative data on emissions and other forms of pollution, on emission limit values, on the application of best available techniques in accordance with Articles 14 and 15, in particular on the granting of exemptions in accordance with Article 15(4), and on progress made concerning the development and application of emerging techniques in accordance with Article 27. Member States shall make the information available in an electronic format.

2. The type, format and frequency of information to be made available pursuant to paragraph 1 shall be established in accordance with the regulatory procedure referred to in Article 75(2). This shall include the determination of the specific activities and pollutants for which data referred to in paragraph 1 shall be made available.

3. For all combustion plants covered by Chapter III of this Directive, Member States shall, from 1 January 2016, establish an annual inventory of the sulphur dioxide, nitrogen oxides and dust emissions and energy input.

Taking into account the aggregation rules set out in Article 29, the competent authority shall obtain the following data for each combustion plant:

(a) the total rated thermal input (MW) of the combustion plant;

(b) the type of combustion plant: boiler, gas turbine, gas engine, diesel engine, other (specifying the type);

(c) the date of the start of operation of the combustion plant;

(d) the total annual emissions (tonnes per year) of sulphur dioxide, nitrogen oxides and dust (as total suspended particles);

(e) the number of operating hours of the combustion plant;

(f) the total annual amount of energy input, related to the net calorific value (TJ per year), broken down in terms of the following categories of fuel: coal, lignite, biomass, peat, other solid fuels (specifying the type), liquid fuels, natural gas, other gases (specifying the type).

The annual plant-by-plant data contained in these inventories shall be made available to the Commission upon request.

A summary of the inventories shall be made available to the Commission every 3 years within 12 months from the end of the three-year period considered. This summary shall show separately the data for combustion plants within refineries.

The Commission shall make available to the Member States and to the public a summary of the comparison and evaluation of those inventories in accordance with Directive 2003/4/EC within 24 months from the end of the three-year period considered.

4. Member States shall, from 1 January 2016, report the following data annually to the Commission:

(a) for combustion plants to which Article 31 applies, the sulphur content of the indigenous solid fuel used and the rate of desulphurisation achieved, averaged over each month. For the first year where Article 31 is applied, the technical justification of the non-feasibility of complying with the emission limit values referred to in Article 30(2) and (3) shall also be reported; and

(b) for combustion plants which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the number of operating hours per year.

Article 73

Review

1. By 7 January 2016, and every 3 years thereafter, the Commission shall submit to the European Parliament and to the Council a report reviewing the implementation of this Directive on the basis of the information referred to in Article 72.

That report shall include an assessment of the need for Union action through the establishment or updating of Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance for activities within the scope of the BAT conclusions adopted during the previous three-year period, on the basis of the following criteria:

(a) the impact of the activities concerned on the environment as a whole; and

(b) the state of implementation of best available techniques for the activities concerned.

That assessment shall consider the opinion of the forum referred to in Article 13(4).

Chapter III and Annex V of this Directive shall be considered to represent the Union-wide minimum requirements in the case of large combustion plants.

The report shall be accompanied by a legislative proposal where appropriate. Where the assessment referred to in the second subparagraph identifies such a need, the legislative proposal shall include provisions establishing or updating Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance assessment for the activities concerned.

2. The Commission shall, by 31 December 2012, review the need to control emissions from:

(a) the combustion of fuels in installations with a total rated thermal input below 50 MW;

(b) the intensive rearing of cattle; and

(c) the spreading of manure.

The Commission shall report the results of that review to the European Parliament and to the Council accompanied by a legislative proposal where appropriate.

3. The Commission shall report to the European Parliament and the Council, by 31 December 2011, on the establishment in Annex I of:

(a) differentiated capacity thresholds for the rearing of different poultry species, including the specific case of quail;

(b) capacity thresholds for the simultaneous rearing of different types of animals within the same installation.

The Commission shall report the results of that review to the European Parliament and to the Council accompanied by a legislative proposal where appropriate.

Article 74

Amendments of Annexes

In order to allow the provisions of this Directive to be adapted to scientific and technical progress on the basis of best available techniques, the Commission shall adopt delegated acts in accordance with Article 76 and subject to the conditions laid down in Articles 77 and 78 as regards the adaptation of Parts 3 and 4 of Annex V, Parts 2, 6, 7 and 8 of Annex VI and Parts 5, 6, 7 and 8 of Annex VII to such scientific and technical progress.

Article 75

Committee procedure

1. The Commission shall be assisted by a committee.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at 3 months.

Article 76

Exercise of the delegation

1. The power to adopt the delegated acts referred to in Article 48(5) and Article 74 shall be conferred on the Commission for a period of 5 years from 6 January 2011. The Commission shall draw up a report in respect of the delegated power at the latest 6 months before the end of the five-year period. The delegation of power shall be automatically extended for periods of an identical duration, unless the European Parliament or the Council revokes it in accordance with Article 77.

2. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

3. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in Articles 77 and 78.

Article 77

Revocation of the delegation

1. The delegation of power referred to in Article 48(5) and Article 74 may be revoked at any time by the European Parliament or by the Council.

2. The institution which has commenced an internal procedure for deciding whether to revoke a delegation of power shall endeavour to inform the other institution and the Commission within a reasonable time before the final decision is taken, indicating the delegated power which could be subject to revocation and possible reasons for a revocation.

3. The decision of revocation shall put an end to the delegation of the power specified in that decision. It shall take effect immediately or on a later date specified therein. It shall not affect the validity of the delegated acts already in force. It shall be published in the *Official Journal of the European Union*.

Article 78

Objections to delegated acts

1. The European Parliament or the Council may object to a delegated act within a period of 2 months from the date of notification.

At the initiative of the European Parliament or the Council that period shall be extended by 2 months.

2. If, on expiry of the period referred to in paragraph 1, neither the European Parliament nor the Council has objected to the delegated act, it shall be published in the *Official Journal of the European Union* and shall enter into force on the date stated therein.

The delegated act may be published in the *Official Journal of the European Union* and enter into force before the expiry of that period if the European Parliament and the Council have both informed the Commission of their intention not to raise objections.

3. If either the European Parliament or the Council objects to the delegated act within the period referred to in paragraph 1, it shall not enter into force. The institution which objects shall state the reasons for objecting to the delegated act.

Article 79

Penalties

Member States shall determine penalties applicable to infringements of the national provisions adopted pursuant to this Directive. The penalties thus provided for shall be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 7 January 2013 and shall notify it without delay of any subsequent amendment affecting them.

Article 80

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Article 2, points (8), (11) to (15), (18) to (23), (26) to (30), (34) to (38) and (41) of Article 3, Article 4(2) and (3), Article 7, Articles 8 and 10, Article 11(e) and (h), Article 12(1)(e) and (h), Article 13(7), point (ii) of Article 14(1)(c), points (d), (e), (f) and (h) of Article 14(1), Article 14(2) to (7), Article 15(2) to (5), Articles 16, 17 and 19, Article 21(2) to (5), Articles 22, 23, 24, 27, 28 and 29, Article 30(1), (2), (3), (4), (7) and (8), Articles 31, 32, 33, 34, 35, 36, 38 and 39, Article 40(2) and (3), Articles 42 and 43, Article 45(1), Article 58, Article 59(5), Article 63, Article 65(3), Articles 69, 70, 71, 72 and 79, and with the first subparagraph and points 1.1, 1.4, 2.5(b), 3.1, 4, 5, 6.1(c), 6.4(b), 6.10 and 6.11 of Annex I, Annex II, point 12 of Annex III, Annex V, point (b) of Part 1, points 2.2, 2.4, 3.1 and 3.2 of Part 4, points 2.5 and 2.6 of Part 6 and point 1.1(d) of Part 8 of Annex VI, point 2 of Part 4, point 1 of Part 5, point 3 of Part 7 of Annex VII, points 1 and 2(c) of Part 1, points 2 and 3 of Part 2 and Part 3 of Annex VIII by 7 January 2013.

They shall apply those measures from that same date.

When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 81

Repeal

1. Directives 78/176/EEC, 82/883/EEC, 92/112/EEC, 1999/13/EC, 2000/76/EC and 2008/1/EC, as amended by the acts listed in Annex IX, Part A are repealed with effect from 7 January 2014, without prejudice to the obligations of the Member States relating to the time limits for transposition into national law and application of the Directives set out in Annex IX, Part B.

2. Directive 2001/80/EC as amended by the acts listed in Annex IX, Part A is repealed with effect from 1 January 2016, without prejudice to the obligations of the Member States relating to the time limits for transposition into national law and application of the Directives set out in Annex IX, Part B.

3. References to the repealed Directives shall be construed as references to this Directive and shall be read in accordance with the correlation table set out in Annex X.

Article 82

Transitional provisions

1. In relation to installations carrying out activities referred to in Annex I, point 1.1 for activities with a total rated thermal input exceeding 50 MW, points 1.2 and 1.3, point 1.4(a), points 2.1 to 2.6, points 3.1 to 3.5, points 4.1 to 4.6 for activities concerning production by chemical processing, points 5.1 and 5.2 for activities covered by Directive 2008/1/EC, point 5.3 (a)(i) and (ii), point 5.4, point 6.1(a) and (b), points 6.2 and 6.3, point 6.4(a), point 6.4(b) for activities covered by Directive 2008/1/EC, point 6.4(c) and points 6.5 to 6.9 which are in operation and hold a permit before 7 January 2013 or the operators of which have submitted a complete application for a permit before that date, provided that those installations are put into operation no later than 7 January 2014, Member States shall apply the laws, regulations and administrative provisions adopted in accordance with Article 80(1) from 7 January 2014 with the exception of Chapter III and Annex V.

2. In relation to installations carrying out activities referred to in Annex I, point 1.1 for activities with a total rated thermal input of 50 MW, point 1.4(b), points 4.1 to 4.6 for activities concerning production by biological processing, points 5.1 and 5.2 for activities not covered by Directive 2008/1/EC, point 5.3(a)(iii) to (v), point 5.3(b), points 5.5 and 5.6, point 6.1(c), point 6.4(b) for activities not covered by Directive 2008/1/EC and points 6.10 and 6.11 which are in operation before 7 January 2013, Member States shall apply the laws, regulations and administrative provisions adopted in accordance with this Directive from 7 July 2015 with the exception of Chapters III and IV and Annexes V and VI.

3. In relation to combustion plants referred to in Article 30(2), Member States shall, from 1 January 2016, apply the laws, regulations and administrative provisions adopted in accordance with Article 80(1) to comply with Chapter III and Annex V.

4. In relation to combustion plants referred to in Article 30(3), Member States shall no longer apply Directive 2001/80/EC from 7 January 2013.

5. In relation to combustion plants which co-incinerate waste, point 3.1 of Part 4 of Annex VI shall apply until:

(a) 31 December 2015, for combustion plants referred to in Article 30(2);

(b) 7 January 2013, for combustion plants referred to in Article 30(3).

6. Point 3.2 of Part 4 of Annex VI shall apply in relation to combustion plants which co-incinerate waste, as from:

(a) 1 January 2016, for combustion plants referred to in Article 30(2)

(b) 7 January 2013, for combustion plants referred to in Article 30(3).

7. Article 58 shall apply from 1 June 2015. Until that date, substances or mixtures which, because of their content of volatile organic compounds classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No 1272/2008, are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or the risk phrases R45, R46, R49, R60 or R61, shall be replaced, as far as possible, by less harmful substances or mixtures within the shortest possible time.

8. Article 59(5) shall apply from 1 June 2015. Until that date, the emissions of either volatile organic compounds which are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or the risk phrases R45, R46, R49, R60 or R61 or halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351 or the risk phrases R40 or R68, shall be controlled under contained conditions, as far as technically and economically feasible, to safeguard public health and the environment and shall not exceed the relevant emission limit values set out in Part 4 of Annex VII.

9. Point 2 of Part 4 of Annex VII shall apply from 1 June 2015. Until that date, for emissions of halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351 or the risk phrases R40 or R68, where the mass flow of the sum of the compounds causing the hazard statements H341 or H351 or the labelling R40 or R68 is greater than, or equal to, 100 g/h, an emission limit value of 20 mg/Nm^3 shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

Article 83

Entry into force

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

Article 84

Addressees

This Directive is addressed to the Member States.

Done at Strasbourg, 24 November 2010.

For the European Parliament	*For the Council*
The President	*The President*
J. BUZEK	O. CHASTEL

ANNEX I

Categories of activities referred to in Article 10

The threshold values given below generally refer to production capacities or outputs. Where several activities falling under the same activity description containing a threshold are operated in the same installation, the capacities of such activities are added together. For waste management activities, this calculation shall apply at the level of activities 5.1, 5.3(a) and 5.3(b).

The Commission shall establish guidance on:

(a) the relationship between waste management activities described in this Annex and those described in Annexes I and II to Directive 2008/98/EC; and

(b) the interpretation of the term 'industrial scale' regarding the description of chemical industry activities described in this Annex.

1. Energy industries

1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more

1.2. Refining of mineral oil and gas

1.3. Production of coke

1.4. Gasification or liquefaction of:

(a) coal;

(b) other fuels in installations with a total rated thermal input of 20 MW or more.

2. Production and processing of metals

2.1. Metal ore (including sulphide ore) roasting or sintering

2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour

2.3. Processing of ferrous metals:

(a) operation of hot-rolling mills with a capacity exceeding 20 tonnes of crude steel per hour;

(b) operation of smitheries with hammers the energy of which exceeds 50 kilojoule per hammer, where the calorific power used exceeds 20 MW;

(c) application of protective fused metal coats with an input exceeding 2 tonnes of crude steel per hour.

2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day

2.5. Processing of non-ferrous metals:

(a) production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes;

(b) melting, including the alloyage, of non-ferrous metals, including recovered products and operation of non-ferrous metal foundries, with a melting capacity exceeding 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals.

2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m^3

3. Mineral industry

3.1. Production of cement, lime and magnesium oxide:

(a) production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other kilns with a production capacity exceeding 50 tonnes per day;

(b) production of lime in kilns with a production capacity exceeding 50 tonnes per day;

(c) production of magnesium oxide in kilns with a production capacity exceeding 50 tonnes per day.

3.2. Production of asbestos or the manufacture of asbestos-based products

3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day

3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day

3.5. Manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m^3 and with a setting density per kiln exceeding 300 kg/m^3

4. Chemical industry

For the purpose of this section, production within the meaning of the categories of activities contained in this section means the production on an industrial scale by chemical or biological processing of substances or groups of substances listed in points 4.1 to 4.6

4.1. Production of organic chemicals, such as:

(a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);

(b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters and mixtures of esters, acetates, ethers, peroxides and epoxy resins;

(c) sulphurous hydrocarbons;

(d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates;

(e) phosphorus-containing hydrocarbons;

(f) halogenic hydrocarbons;

(g) organometallic compounds;

(h) plastic materials (polymers, synthetic fibres and cellulose-based fibres);

(i) synthetic rubbers;

(j) dyes and pigments;

(k) surface-active agents and surfactants.

4.2. Production of inorganic chemicals, such as:

(a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride;

(b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids;

(c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;

(d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate;

(e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide.

4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)

4.4. Production of plant protection products or of biocides

4.5. Production of pharmaceutical products including intermediates

4.6. Production of explosives

5. Waste management

5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:

(a) biological treatment;

(b) physico-chemical treatment;

(c) blending or mixing prior to submission to any of the other activities listed in points 5.1 and 5.2;

(d) repackaging prior to submission to any of the other activities listed in points 5.1 and 5.2;

(e) solvent reclamation/regeneration;

(f) recycling/reclamation of inorganic materials other than metals or metal compounds;

(g) regeneration of acids or bases;

(h) recovery of components used for pollution abatement;

(i) recovery of components from catalysts;

(j) oil re-refining or other reuses of oil;

(k) surface impoundment.

5.2. Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants:

(a) for non-hazardous waste with a capacity exceeding 3 tonnes per hour;

(b) for hazardous waste with a capacity exceeding 10 tonnes per day.

5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment [1]:

(i) biological treatment;

(ii) physico-chemical treatment;

(iii) pre-treatment of waste for incineration or co-incineration;

(iv) treatment of slags and ashes;

(v) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

[1] OJ L 135, 30.5.1991, p. 40.

(b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC:

(i) biological treatment;

(ii) pre-treatment of waste for incineration or co-incineration;

(iii) treatment of slags and ashes;

(iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.

5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste [1], receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste

5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated

5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes

6. Other activities

6.1. Production in industrial installations of:

(a) pulp from timber or other fibrous materials;

(b) paper or card board with a production capacity exceeding 20 tonnes per day;

(c) one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600 m^3 per day.

6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day

6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day

6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day

(b) Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from:

(i) only animal raw materials (other than exclusively milk) with a finished product production capacity greater than 75 tonnes per day;

(ii) only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day or 600 tonnes per day where the installation operates for a period of no more than 90 consecutive days in any year;

(iii) animal and vegetable raw materials, both in combined and separate products, with a finished product production capacity in tonnes per day greater than:

— 75 if A is equal to 10 or more; or,

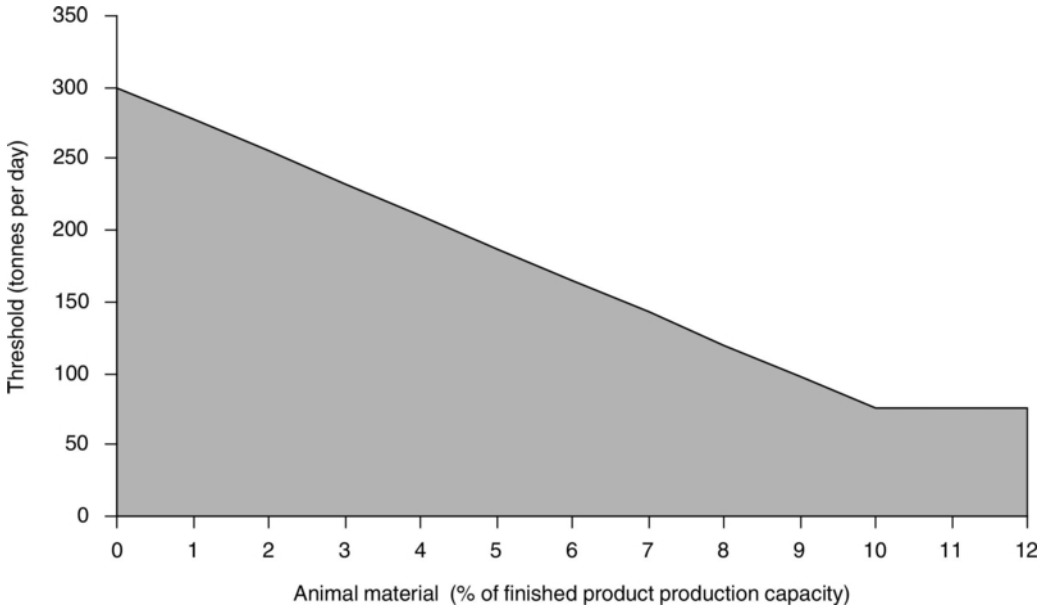
— [300- (22,5 × A)] in any other case,

where 'A' is the portion of animal material (in percent of weight) of the finished product production capacity.

Packaging shall not be included in the final weight of the product.

[1] OJ L 182, 16.7.1999, p. 1.

This subsection shall not apply where the raw material is milk only.



(c) Treatment and processing of milk only, the quantity of milk received being greater than 200 tonnes per day (average value on an annual basis).

6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day

6.6. Intensive rearing of poultry or pigs:

(a) with more than 40 000 places for poultry;

(b) with more than 2 000 places for production pigs (over 30 kg), or

(c) with more than 750 places for sows.

6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year

6.8. Production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation

6.9. Capture of CO_2 streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC

6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m^3 per day other than exclusively treating against sapstain

6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II

ANNEX II

List of polluting substances

AIR

1. Sulphur dioxide and other sulphur compounds
2. Oxides of nitrogen and other nitrogen compounds
3. Carbon monoxide
4. Volatile organic compounds
5. Metals and their compounds
6. Dust including fine particulate matter
7. Asbestos (suspended particulates, fibres)
8. Chlorine and its compounds
9. Fluorine and its compounds
10. Arsenic and its compounds
11. Cyanides
12. Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air
13. Polychlorinated dibenzodioxins and polychlorinated dibenzofurans

WATER

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment
2. Organophosphorus compounds
3. Organotin compounds
4. Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment
5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances
6. Cyanides
7. Metals and their compounds
8. Arsenic and its compounds
9. Biocides and plant protection products
10. Materials in suspension
11. Substances which contribute to eutrophication (in particular, nitrates and phosphates)
12. Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.)
13. Substances listed in Annex X to Directive 2000/60/EC

ANNEX III

Criteria for determining best available techniques

1. the use of low-waste technology;

2. the use of less hazardous substances;

3. the furthering of recovery and recycling of substances generated and used in the process and of waste, where appropriate;

4. comparable processes, facilities or methods of operation which have been tried with success on an industrial scale;

5. technological advances and changes in scientific knowledge and understanding;

6. the nature, effects and volume of the emissions concerned;

7. the commissioning dates for new or existing installations;

8. the length of time needed to introduce the best available technique;

9. the consumption and nature of raw materials (including water) used in the process and energy efficiency;

10. the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;

11. the need to prevent accidents and to minimise the consequences for the environment;

12. information published by public international organisations.

ANNEX IV

Public participation in decision-making

1. The public shall be informed (by public notices or other appropriate means such as electronic media where available) of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:

   (a) the application for a permit or, as the case may be, the proposal for the updating of a permit or of permit conditions in accordance with Article 21, including the description of the elements listed in Article 12(1);

   (b) where applicable, the fact that a decision is subject to a national or transboundary environmental impact assessment or to consultations between Member States in accordance with Article 26;

   (c) details of the competent authorities responsible for taking the decision, those from which relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;

   (d) the nature of possible decisions or, where there is one, the draft decision;

   (e) where applicable, the details relating to a proposal for the updating of a permit or of permit conditions;

   (f) an indication of the times and places where, or means by which, the relevant information will be made available;

   (g) details of the arrangements for public participation and consultation made pursuant to point 5.

2. Member States shall ensure that, within appropriate time-frames, the following is made available to the public concerned:

   (a) in accordance with national law, the main reports and advice issued to the competent authority or authorities at the time when the public concerned were informed in accordance with point 1;

   (b) in accordance with Directive 2003/4/EC, information other than that referred to in point 1 which is relevant for the decision in accordance with Article 5 of this Directive and which only becomes available after the time the public concerned was informed in accordance with point 1.

3. The public concerned shall be entitled to express comments and opinions to the competent authority before a decision is taken.

4. The results of the consultations held pursuant to this Annex must be taken into due account in the taking of a decision.

5. The detailed arrangements for informing the public (for example by bill posting within a certain radius or publication in local newspapers) and consulting the public concerned (for example by written submissions or by way of a public inquiry) shall be determined by the Member States. Reasonable time-frames for the different phases shall be provided, allowing sufficient time to inform the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to this Annex.

ANNEX V

Technical provisions relating to combustion plants

PART 1

Emission limit values for combustion plants referred to in Article 30(2)

1. All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correction for the water vapour content of the waste gases and at a standardised O_2 content of 6 % for solid fuels, 3 % for combustion plants, other than gas turbines and gas engines using liquid and gaseous fuels and 15 % for gas turbines and gas engines.

2. Emission limit values (mg/Nm^3) for SO_2 for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass	Peat	Liquid fuels
50-100	400	200	300	350
100-300	250	200	300	250
> 300	200	200	200	200

Combustion plants, using solid fuels which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO_2 of 800 mg/Nm^3.

Combustion plants using liquid fuels, which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO_2 of 850 mg/Nm^3 in case of plants with a total rated thermal input not exceeding 300 MW and of 400 mg/Nm^3 in case of plants with a total rated thermal input greater than 300 MW.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding two paragraphs in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

3. Emission limit values (mg/Nm^3) for SO_2 for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast furnace	200

Combustion plants, firing low calorific gases from gasification of refinery residues, which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, shall be subject to an emission limit value for SO_2 of 800 mg/Nm^3.

4. Emission limit values (mg/Nm^3) for NO_x for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels
50-100	300 450 in case of pulverised lignite combustion	300	450
100-300	200	250	200 (1)
> 300	200	200	150 (1)

Note:

(1) The emission limit value is 450 mg/Nm^3 for the firing of distillation and conversion residues from the refining of crude-oil for own consumption in combustion plants with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

Combustion plants in chemical installations using liquid production residues as non-commercial fuel for own consumption with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, shall be subject to an emission limit value for NO_x of 450 mg/Nm^3.

Combustion plants using solid or liquid fuels with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 450 mg/Nm^3.

Combustion plants using solid fuels with a total rated thermal input greater than 500 MW, which were granted a permit before 1 July 1987 and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 450 mg/Nm^3.

Combustion plants using liquid fuels, with a total rated thermal input greater than 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 400 mg/Nm^3.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding three paragraphs in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

5. Gas turbines (including combined cycle gas turbines (CCGT)) using light and middle distillates as liquid fuels shall be subject to an emission limit value for NO_x of 90 mg/Nm^3 and for CO of 100 mg/Nm^3.

Gas turbines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

6. Emission limit values (mg/Nm^3) for NO_x and CO for gas fired combustion plants

	NO_x	CO
Combustion plants firing natural gas with the exception of gas turbines and gas engines	100	100
Combustion plants firing blast furnace gas, coke oven gas or low calorific gases from gasification of refinery residues, with the exception of gas turbines and gas engines	200 (4)	—
Combustion plants firing other gases, with the exception of gas turbines and gas engines	200 (4)	—
Gas turbines (including CCGT), using natural gas (1) as fuel	50 (2) (3)	100
Gas turbines (including CCGT), using other gases as fuel	120	—
Gas engines	100	100

Notes:

(1) Natural gas is naturally occurring methane with not more than 20 % (by volume) of inerts and other constituents.

(2) 75 mg/Nm^3 in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:

(i) gas turbines, used in combined heat and power systems having an overall efficiency greater than 75 %;

(ii) gas turbines used in combined cycle plants having an annual average overall electrical efficiency greater than 55 %;

(iii) gas turbines for mechanical drives.

(3) For single cycle gas turbines not falling into any of the categories mentioned under note (2), but having an efficiency greater than 35 % – determined at ISO base load conditions – the emission limit value for NO_x shall be 50xη/35 where η is the gas turbine efficiency at ISO base load conditions expressed as a percentage.

(4) 300 mg/Nm^3 for such combustion plants with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

For gas turbines (including CCGT), the NO_x and CO emission limit values set out in the table contained in this point apply only above 70 % load.

For gas turbines (including CCGT) which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the emission limit value for NO_x is 150 mg/Nm^3 when firing natural gas and 200 mg/Nm^3 when firing other gases or liquid fuels.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding paragraph in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

7. Emission limit values (mg/Nm^3) for dust for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels (1)
50-100	30	30	30
100-300	25	20	25
> 300	20	20	20

Note:

(1) The emission limit value is 50 mg/Nm^3 for the firing of distillation and conversion residues from the refining of crude oil for own consumption in combustion plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

8. Emission limit values (mg/Nm^3) for dust for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	5
Blast furnace gas	10
Gases produced by the steel industry which can be used elsewhere	30

PART 2

Emission limit values for combustion plants referred to in Article 30(3)

1. All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correction for the water vapour content of the waste gases and at a standardised O_2 content of 6 % for solid fuels, 3 % for combustion plants other than gas turbines and gas engines using liquid and gaseous fuels and 15 % for gas turbines and gas engines.

   In case of combined cycle gas turbines with supplementary firing, the standardised O_2 content may be defined by the competent authority, taking into account the specific characteristics of the installation concerned.

2. Emission limit values (mg/Nm^3) for SO_2 for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass	Peat	Liquid fuels
50-100	400	200	300	350
100-300	200	200	300 250 in case of fluidised bed combustion	200
> 300	150 200 in case of circulating or pressurised fluidised bed combustion	150	150 200 in case of fluidised bed combustion	150

3. Emission limit values (mg/Nm^3) for SO_2 for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast furnace	200

4. Emission limit values (mg/Nm^3) for NO_x for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels
50-100	300 400 in case of pulverised lignite combustion	250	300
100-300	200	200	150
> 300	150 200 in case of pulverised lignite combustion	150	100

5. Gas turbines (including CCGT) using light and middle distillates as liquid fuels shall be subject to an emission limit value for NO_x of 50 mg/Nm^3 and for CO of 100 mg/Nm^3

Gas turbines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

6. Emission limit values (mg/Nm^3) for NO_x and CO for gas fired combustion plants

	NO_x	CO
Combustion plants other than gas turbines and gas engines	100	100
Gas turbines (including CCGT)	50 (1)	100
Gas engines	75	100

Note:

(1) For single cycle gas turbines having an efficiency greater than 35 % – determined at ISO base load conditions – the emission limit value for NO_x shall be $50x\eta/35$ where η is the gas turbine efficiency at ISO base load conditions expressed as a percentage.

For gas turbines (including CCGT), the NO_x and CO emission limit values set out in this point apply only above 70 % load.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

7. Emission limit values (mg/Nm^3) for dust for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	
50-300	20
> 300	10
	20 for biomass and peat

8. Emission limit values (mg/Nm^3) for dust for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	5
Blast furnace gas	10
Gases produced by the steel industry which can be used elsewhere	30

PART 3

Emission monitoring

1. The concentrations of SO_2, NO_x and dust in waste gases from each combustion plant with a total rated thermal input of 100 MW or more shall be measured continuously.

The concentration of CO in waste gases from each combustion plant firing gaseous fuels with a total rated thermal input of 100 MW or more shall be measured continuously.

2. The competent authority may decide not to require the continuous measurements referred to in point 1 in the following cases:

(a) for combustion plants with a life span of less than 10 000 operational hours;

(b) for SO_2 and dust from combustion plants firing natural gas;

(c) for SO_2 from combustion plants firing oil with known sulphur content in cases where there is no waste gas desulphurisation equipment;

(d) for SO_2 from combustion plants firing biomass if the operator can prove that the SO_2 emissions can under no circumstances be higher than the prescribed emission limit values.

3. Where continuous measurements are not required, measurements of SO_2, NO_x, dust and, for gas fired plants, also of CO shall be required at least once every 6 months.

4. For combustion plants firing coal or lignite, the emissions of total mercury shall be measured at least once per year.

5. As an alternative to the measurements of SO_2 and NO_x referred to in point 3, other procedures, verified and approved by the competent authority, may be used to determine the SO_2 and NO_x emissions. Such procedures shall use relevant CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality.

6. The competent authority shall be informed of significant changes in the type of fuel used or in the mode of operation of the plant. The competent authority shall decide whether the monitoring requirements laid down in points 1 to 4 are still adequate or require adaptation.

7. The continuous measurements carried out in accordance with point 1 shall include the measurement of the oxygen content, temperature, pressure and water vapour content of the waste gases. The continuous measurement of the water vapour content of the waste gases shall not be necessary, provided that the sampled waste gas is dried before the emissions are analysed.

8. Sampling and analysis of relevant polluting substances and measurements of process parameters as well as the quality assurance of automated measuring systems and the reference measurement methods to calibrate those systems shall be carried out in accordance with CEN standards. If CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality shall apply.

The automated measuring systems shall be subject to control by means of parallel measurements with the reference methods at least once per year.

The operator shall inform the competent authority about the results of the checking of the automated measuring systems.

9. At the emission limit value level, the values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide	10 %
Sulphur dioxide	20 %
Nitrogen oxides	20 %
Dust	30 %

10. The validated hourly and daily average values shall be determined from the measured valid hourly average values after having subtracted the value of the confidence interval specified in point 9.

Any day in which more than three hourly average values are invalid due to malfunction or maintenance of the automated measuring system shall be invalidated. If more than 10 days over a year are invalidated for such situations the competent authority shall require the operator to take adequate measures to improve the reliability of the automated measuring system.

11. In the case of plants which must comply with the rates of desulphurisation referred to in Article 31, the sulphur content of the fuel which is fired in the combustion plant shall also be regularly monitored. The competent authorities shall be informed of substantial changes in the type of fuel used.

PART 4

Assessment of compliance with emission limit values

1. In the case of continuous measurements, the emission limit values set out in Parts 1 and 2 shall be regarded as having been complied with if the evaluation of the measurement results indicates, for operating hours within a calendar year, that all of the following conditions have been met:

   (a) no validated monthly average value exceeds the relevant emission limit values set out in Parts 1 and 2;

   (b) no validated daily average value exceeds 110 % of the relevant emission limit values set out in Parts 1 and 2;

   (c) in cases of combustion plants composed only of boilers using coal with a total rated thermal input below 50 MW, no validated daily average value exceeds 150 % of the relevant emission limit values set out in Parts 1 and 2,

   (d) 95 % of all the validated hourly average values over the year do not exceed 200 % of the relevant emission limit values set out in Parts 1 and 2.

   The validated average values are determined as set out in point 10 of Part 3.

   For the purpose of the calculation of the average emission values, the values measured during the periods referred to in Article 30(5) and (6) and Article 37 as well as during the start-up and shut-down periods shall be disregarded.

2. Where continuous measurements are not required, the emission limit values set out in Parts 1 and 2 shall be regarded as having been complied with if the results of each of the series of measurements or of the other procedures defined and determined according to the rules laid down by the competent authorities do not exceed the emission limit values.

PART 5

Minimum rate of desulphurisation

1. Minimum rate of desulphurisation for combustion plants referred to in Article 30(2)

Total rated thermal input (MW)	Minimum rate of desulphurisation	
	Plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003	Other plants
50-100	80 %	92 %
100-300	90 %	92 %
> 300	96 % (1)	96 %

Note:
(1) For combustion plants firing oil shale, the minimum rate of desulphurisation is 95 %.

2. Minimum rate of desulphurisation for combustion plants referred to in Article 30(3)

Total rated thermal input (MW)	Minimum rate of desulphurisation
50-100	93 %
100-300	93 %
> 300	97 %

PART 6

Compliance with rate of desulphurisation

The minimum rates of desulphurisation set out in Part 5 of this Annex shall apply as a monthly average limit value.

PART 7

Average emission limit values for multi-fuel firing combustion plants within a refinery

Average emission limit values (mg/Nm^3) for SO_2 for multi-fuel firing combustion plants within a refinery, with the exception of gas turbines and gas engines, which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels:

(a) for combustion plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003: 1 000 mg/Nm^3;

(b) for other combustion plants: 600 mg/Nm^3.

These emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correction for the water vapour content of the waste gases and at a standardised O_2 content of 6 % for solid fuels and 3 % for liquid and gaseous fuels.

ANNEX VI

Technical provisions relating to waste incineration plants and waste co-incineration plants

PART 1

Definitions

For the purpose of this Annex the following definitions shall apply:

(a) 'existing waste incineration plant' means one of the following waste incineration plants:

(i) which was in operation and had a permit in accordance with applicable Union law before 28 December 2002,

(ii) which was authorised or registered for waste incineration and had a permit granted before 28 December 2002 in accordance with applicable Union law, provided that the plant was put into operation no later than 28 December 2003,

(iii) which, in the view of the competent authority, was the subject of a full request for authorisation before 28 December 2002, provided that the plant was put into operation not later than 28 December 2004;

(b) 'new waste incineration plant' means any waste incineration plant not covered by point (a).

PART 2

Equivalence factors for dibenzo-p-dioxins and dibenzofurans

For the determination of the total concentration of dioxins and furans, the mass concentrations of the following dibenzo-p-dioxins and dibenzofurans shall be multiplied by the following equivalence factors before summing:

	Toxic equivalence factor
2,3,7,8 — Tetrachlorodibenzodioxin (TCDD)	1
1,2,3,7,8 — Pentachlorodibenzodioxin (PeCDD)	0,5
1,2,3,4,7,8 — Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,6,7,8 — Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,7,8,9 — Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,4,6,7,8 — Heptachlorodibenzodioxin (HpCDD)	0,01
Octachlorodibenzodioxin (OCDD)	0,001
2,3,7,8 — Tetrachlorodibenzofuran (TCDF)	0,1
2,3,4,7,8 — Pentachlorodibenzofuran (PeCDF)	0,5
1,2,3,7,8 — Pentachlorodibenzofuran (PeCDF)	0,05
1,2,3,4,7,8 — Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,6,7,8 — Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,7,8,9 — Hexachlorodibenzofuran (HxCDF)	0,1
2,3,4,6,7,8 — Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,4,6,7,8 — Heptachlorodibenzofuran (HpCDF)	0,01
1,2,3,4,7,8,9 — Heptachlorodibenzofuran (HpCDF)	0,01
Octachlorodibenzofuran (OCDF)	0,001

PART 3

Air emission limit values for waste incineration plants

1. All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correcting for the water vapour content of the waste gases.

They are standardised at 11 % oxygen in waste gas except in case of incineration of mineral waste oil as defined in point 3 of Article 3 of Directive 2008/98/EC, when they are standardised at 3 % oxygen, and in the cases referred to in Point 2.7 of Part 6.

1.1. Daily average emission limit values for the following polluting substances (mg/Nm^3)

Total dust	10
Gaseous and vaporous organic substances, expressed as total organic carbon (TOC)	10
Hydrogen chloride (HCl)	10
Hydrogen fluoride (HF)	1
Sulphur dioxide (SO_2)	50
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as NO_2 for existing waste incineration plants with a nominal capacity exceeding 6 tonnes per hour or new waste incineration plants	200
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as NO_2 for existing waste incineration plants with a nominal capacity of 6 tonnes per hour or less	400

1.2. Half-hourly average emission limit values for the following polluting substances (mg/Nm^3)

	(100 %) A	(97 %) B
Total dust	30	10
Gaseous and vaporous organic substances, expressed as total organic carbon (TOC)	20	10
Hydrogen chloride (HCl)	60	10
Hydrogen fluoride (HF)	4	2
Sulphur dioxide (SO_2)	200	50
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as NO_2 for existing waste incineration plants with a nominal capacity exceeding 6 tonnes per hour or new waste incineration plants	400	200

1.3. Average emission limit values (mg/Nm^3) for the following heavy metals over a sampling period of a minimum of 30 minutes and a maximum of 8 hours

Cadmium and its compounds, expressed as cadmium (Cd)	Total: 0,05
Thallium and its compounds, expressed as thallium (Tl)	
Mercury and its compounds, expressed as mercury (Hg)	0,05
Antimony and its compounds, expressed as antimony (Sb)	Total: 0,5
Arsenic and its compounds, expressed as arsenic (As)	
Lead and its compounds, expressed as lead (Pb)	
Chromium and its compounds, expressed as chromium (Cr)	
Cobalt and its compounds, expressed as cobalt (Co)	
Copper and its compounds, expressed as copper (Cu)	
Manganese and its compounds, expressed as manganese (Mn)	
Nickel and its compounds, expressed as nickel (Ni)	
Vanadium and its compounds, expressed as vanadium (V)	

These average values cover also the gaseous and the vapour forms of the relevant heavy metal emissions as well as their compounds.

1.4. Average emission limit value (ng/Nm^3) for dioxins and furans over a sampling period of a minimum of 6 hours and a maximum of 8 hours. The emission limit value refers to the total concentration of dioxins and furans calculated in accordance with Part 2.

Dioxins and furans	0,1

1.5. Emission limit values (mg/Nm^3) for carbon monoxide (CO) in the waste gases:

(a) 50 as daily average value;

(b) 100 as half-hourly average value;

(c) 150 as 10-minute average value.

The competent authority may authorise exemptions from the emission limit values set out in this point for waste incineration plants using fluidised bed technology, provided that the permit sets an emission limit value for carbon monoxide (CO) of not more than 100 mg/Nm^3 as an hourly average value.

2. Emission limit values applicable in the circumstances described in Article 46(6) and Article 47.

The total dust concentration in the emissions into the air of a waste incineration plant shall under no circumstances exceed 150 mg/Nm^3 expressed as a half-hourly average. The air emission limit values for TOC and CO set out in points 1.2 and 1.5(b) shall not be exceeded.

3. Member States may lay down rules governing the exemptions provided for in this Part.

PART 4

Determination of air emission limit values for the co-incineration of waste

1. The following formula (mixing rule) shall be applied whenever a specific total emission limit value 'C' has not been set out in a table in this Part.

The emission limit value for each relevant polluting substance and CO in the waste gas resulting from the co-incineration of waste shall be calculated as follows:

$$\frac{V_{waste} \times C_{waste} + V_{proc} \times C_{proc}}{V_{waste} + C_{proc}} = C$$

V_{waste}: waste gas volume resulting from the incineration of waste only determined from the waste with the lowest calorific value specified in the permit and standardised at the conditions given by this Directive.

If the resulting heat release from the incineration of hazardous waste amounts to less than 10 % of the total heat released in the plant, V_{waste} must be calculated from a (notional) quantity of waste that, being incinerated, would equal 10 % heat release, the total heat release being fixed.

C_{waste}: emission limit values for waste incineration plants set out in Part 3

V_{proc}: waste gas volume resulting from the plant process including the combustion of the authorised fuels normally used in the plant (wastes excluded) determined on the basis of oxygen contents at which the emissions must be standardised as set out in Union or national law. In the absence of legislation for this kind of plant, the real oxygen content in the waste gas without being thinned by addition of air unnecessary for the process must be used.

C_{proc}: emission limit values as set out in this Part for certain industrial activities or in case of the absence of such values, emission limit values of plants which comply with the national laws, regulations and administrative provisions for such plants while burning the normally authorised fuels (wastes excluded). In the absence of these measures the emission limit values set out in the permit are used. In the absence of such permit values the real mass concentrations are used.

C: total emission limit values at an oxygen content as set out in this Part for certain industrial activities and certain polluting substances or, in case of the absence of such values, total emission limit values replacing the emission limit values as set out in specific Annexes of this Directive. The total oxygen content to replace the oxygen content for the standardisation is calculated on the basis of the content above respecting the partial volumes.

All emission limit values shall be calculated at a temperature of 273,15 K, a pressure of 101,3 kPa and after correcting for the water vapour content of the waste gases.

Member States may lay down rules governing the exemptions provided for in this Part.

2. Special provisions for cement kilns co-incinerating waste

2.1. The emission limit values set out in points 2.2 and 2.3 apply as daily average values for total dust, HCl, HF, NO_x, SO_2 and TOC (for continuous measurements), as average values over the sampling period of a minimum of 30 minutes and a maximum of 8 hours for heavy metals and as average values over the sampling period of a minimum of 6 hours and a maximum of 8 hours for dioxins and furans.

All values are standardised at 10 % oxygen.

Half-hourly average values shall only be needed in view of calculating the daily average values.

2.2. C – total emission limit values (mg/Nm^3 except for dioxins and furans) for the following –polluting substances

Polluting substance	C
Total dust	30
HCl	10
HF	1
NO_x	500 (1)
Cd + Tl	0,05
Hg	0,05
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	0,5
Dioxins and furans (ng/Nm^3)	0,1

(1) Until 1 January 2016, the competent authority may authorise exemptions from the limit value for NO_x for Lepol kilns and long rotary kilns provided that the permit sets a total emission limit value for NO_x of not more than 800 mg/Nm^3.

2.3. C – total emission limit values (mg/Nm^3) for SO_2 and TOC

Pollutant	C
SO_2	50
TOC	10

The competent authority may grant derogations for emission limit values set out in this point in cases where TOC and SO_2 do not result from the co-incineration of waste.

2.4. C- total emission limit values for CO

The competent authority may set emission limit values for CO.

3. Special provisions for combustion plants co-incinerating waste

3.1. C_{proc} expressed as daily average values (mg/Nm^3) valid until the date set out in Article 82(5)

For determining the total rated thermal input of the combustion plants, the aggregation rules as defined in Article 29 shall apply. Half-hourly average values shall only be needed in view of calculating the daily average values.

C_{proc} for solid fuels with the exception of biomass (O_2 content 6 %):

Polluting substances	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	850	200	200
NO_x	—	400	200	200
Dust	50	50	30	30

C_{proc} for biomass (O_2 content 6 %):

Polluting substances	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	200	200	200
NO_x	—	350	300	200
Dust	50	50	30	30

C_{proc} for liquid fuels (O_2 content 3 %):

Polluting substances	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	850	400 to 200 (linear decrease from 100 to 300 MWth)	200
NO_x	—	400	200	200
Dust	50	50	30	30

3.2. C_{proc} expressed as daily average values (mg/Nm^3) valid from the date set out in Article 82(6)

For determining the total rated thermal input of the combustion plants, the aggregation rules as defined in Article 29 shall apply. Half-hourly average values shall only be needed in view of calculating the daily average values.

3.2.1. C_{proc} for combustion plants referred to in Article 30(2), with the exception of gas turbines and gas engines

C_{proc} for solid fuels with the exception of biomass (O_2 content 6 %):

Polluting substance	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	400 for peat: 300	200	200
NO_x	—	300 for pulverised lignite: 400	200	200
Dust	50	30	25 for peat: 20	20

C_{proc} for biomass (O_2 content 6 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	200	200	200
NO_x	—	300	250	200
Dust	50	30	20	20

C_{proc} for liquid fuels (O_2 content 3 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	350	250	200
NO_x	—	400	200	150
Dust	50	30	25	20

3.2.2. C_{proc} for combustion plants referred to in Article 30(3), with the exception of gas turbines and gas engines

C_{proc} for solid fuels with the exception of biomass (O_2 content 6 %):

Polluting substance	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	400 for peat: 300	200 for peat: 300, except in the case of fluidised bed combustion: 250	150 for circulating or pressurised fluidised bed combustion or, in case of peat firing, for all fluidised bed combustion: 200
NO_x	—	300 for peat: 250	200	150 for pulverised lignite combustion: 200
Dust	50	20	20	10 for peat: 20

C_{proc} for biomass (O_2 content 6 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	200	200	150
NO_x	—	250	200	150
Dust	50	20	20	20

C_{proc} for liquid fuels (O_2 content 3 %):

Polluting substance	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2	—	350	200	150
NO_x	—	300	150	100
Dust	50	20	20	10

3.3. C — total emission limit values for heavy metals (mg/Nm^3) expressed as average values over the sampling period of a minimum of 30 minutes and a maximum of 8 hours (O_2 content 6 % for solid fuels and 3 % for liquid fuels)

Polluting substances	C
Cd + Tl	0,05
Hg	0,05
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	0,5

3.4. C — total emission limit value (ng/Nm^3) for dioxins and furans expressed as average value measured over the sampling period of a minimum of 6 hours and a maximum of 8 hours (O_2 content 6 % for solid fuels and 3 % for liquid fuels)

Polluting substance	C
Dioxins and furans	0,1

4. Special provisions for waste co-incineration plants in industrial sectors not covered under Points 2 and 3 of this Part

4.1. C — total emission limit value (ng/Nm^3) for dioxins and furans expressed as average value measured over the sampling period of a minimum of 6 hours and a maximum of 8 hours:

Polluting substance	C
Dioxins and furans	0,1

4.2. C – total emission limit values (mg/Nm^3) for heavy metals expressed as average values over the sampling period of a minimum of 30 minutes and a maximum of 8 hours:

Polluting substances	C
Cd + Tl	0,05
Hg	0,05

PART 5

Emission limit values for discharges of waste water from the cleaning of waste gases

Polluting substances	Emission limit values for unfiltered samples (mg/l except for dioxins and furans)	
1. Total suspended solids as defined in Annex I of Directive 91/271/EEC	(95 %)	(100 %)
	30	45
2. Mercury and its compounds, expressed as mercury (Hg)	0,03	
3. Cadmium and its compounds, expressed as cadmium (Cd)	0,05	
4. Thallium and its compounds, expressed as thallium (Tl)	0,05	
5. Arsenic and its compounds, expressed as arsenic (As)	0,15	
6. Lead and its compounds, expressed as lead (Pb)	0,2	
7. Chromium and its compounds, expressed as chromium (Cr)	0,5	
8. Copper and its compounds, expressed as copper (Cu)	0,5	
9. Nickel and its compounds, expressed as nickel (Ni)	0,5	
10. Zinc and its compounds, expressed as zinc (Zn)	1,5	
11. Dioxins and furans	0,3 ng/l	

PART 6

Monitoring of emissions

1. Measurement techniques

1.1. Measurements for the determination of concentrations of air and water polluting substances shall be carried out representatively.

1.2. Sampling and analysis of all polluting substances including dioxins and furans as well as the quality assurance of automated measuring systems and the reference measurement methods to calibrate them shall be carried out according to CEN-standards. If CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality shall apply. Automated measuring systems shall be subject to control by means of parallel measurements with the reference methods at least once per year.

1.3. At the daily emission limit value level, the values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide:	10 %
Sulphur dioxide:	20 %
Nitrogen dioxide:	20 %
Total dust:	30 %
Total organic carbon:	30 %
Hydrogen chloride:	40 %
Hydrogen fluoride:	40 %.

Periodic measurements of the emissions into air and water shall be carried out in accordance with points 1.1 and 1.2.

2. Measurements relating to air polluting substances

2.1. The following measurements relating to air polluting substances shall be carried out:

(a) continuous measurements of the following substances: NO_x, provided that emission limit values are set, CO, total dust, TOC, HCl, HF, SO_2;

(b) continuous measurements of the following process operation parameters: temperature near the inner wall or at another representative point of the combustion chamber as authorised by the competent authority, concentration of oxygen, pressure, temperature and water vapour content of the waste gas;

(c) at least two measurements per year of heavy metals and dioxins and furans; one measurement at least every 3 months shall, however, be carried out for the first 12 months of operation.

2.2. The residence time as well as the minimum temperature and the oxygen content of the waste gases shall be subject to appropriate verification, at least once when the waste incineration plant or waste co-incineration plant is brought into service and under the most unfavourable operating conditions anticipated.

2.3. The continuous measurement of HF may be omitted if treatment stages for HCl are used which ensure that the emission limit value for HCl is not being exceeded. In that case the emissions of HF shall be subject to periodic measurements as laid down in point 2.1(c).

2.4. The continuous measurement of the water vapour content shall not be required if the sampled waste gas is dried before the emissions are analysed.

2.5. The competent authority may decide not to require continuous measurements for HCl, HF and SO_2 in waste incineration plants or waste co-incineration plants and require periodic measurements as set out in point 2.1(c) or no measurements if the operator can prove that the emissions of those pollutants can under no circumstances be higher than the prescribed emission limit values.

The competent authority may decide not to require continuous measurements for NO_x and require periodic measurements as set out in point 2.1(c) in existing waste incineration plants with a nominal capacity of less than 6 tonnes per hour or in existing waste co-incineration plants with a nominal capacity of less than 6 tonnes per hour if the operator can prove on the basis of information on the quality of the waste concerned, the technologies used and the results of the monitoring of emissions, that the emissions of NO_x can under no circumstances be higher than the prescribed emission limit value.

2.6. The competent authority may decide to require one measurement every 2 years for heavy metals and one measurement per year for dioxins and furans in the following cases:

(a) the emissions resulting from co-incineration or incineration of waste are under all circumstances below 50 % of the emission limit values;

(b) the waste to be co-incinerated or incinerated consists only of certain sorted combustible fractions of non-hazardous waste not suitable for recycling and presenting certain characteristics, and which is further specified on the basis of the assessment referred to in point (c);

(c) the operator can prove on the basis of information on the quality of the waste concerned and the monitoring of the emissions that the emissions are under all circumstances significantly below the emission limit values for heavy metals and dioxins and furans.

2.7. The results of the measurements shall be standardised using the standard oxygen concentrations mentioned in Part 3 or calculated according to Part 4 and by applying the formula given in Part 7.

When waste is incinerated or co-incinerated in an oxygen-enriched atmosphere, the results of the measurements can be standardised at an oxygen content laid down by the competent authority reflecting the special circumstances of the individual case.

When the emissions of polluting substances are reduced by waste gas treatment in a waste incineration plant or waste co-incineration plant treating hazardous waste, the standardisation with respect to the oxygen contents provided for in the first subparagraph shall be done only if the oxygen content measured over the same period as for the polluting substance concerned exceeds the relevant standard oxygen content.

3. Measurements relating to water polluting substances

3.1. The following measurements shall be carried out at the point of waste water discharge:

(a) continuous measurements of pH, temperature and flow;

(b) spot sample daily measurements of total suspended solids or measurements of a flow proportional representative sample over a period of 24 hours;

(c) at least monthly measurements of a flow proportional representative sample of the discharge over a period of 24 hours of Hg, Cd, Tl, As, Pb, Cr, Cu, Ni and Zn;

(d) at least every 6 months measurements of dioxins and furans; however, one measurement at least every 3 months shall be carried out for the first 12 months of operation.

3.2. Where the waste water from the cleaning of waste gases is treated on site collectively with other on-site sources of waste water, the operator shall take the measurements:

(a) on the waste water stream from the waste gas cleaning processes prior to its input into the collective waste water treatment plant;

(b) on the other waste water stream or streams prior to its or their input into the collective waste water treatment plant;

(c) at the point of final waste water discharge, after the treatment, from the waste incineration plant or waste co-incineration plant.

PART 7

Formula to calculate the emission concentration at the standard percentage oxygen concentration

$$E_S = \frac{21 - O_S}{21 - O_M} \times E_M$$

E_S = calculated emission concentration at the standard percentage oxygen concentration

E_M = measured emission concentration

O_S = standard oxygen concentration

O_M = measured oxygen concentration

PART 8

Assessment of compliance with emission limit values

1. Air emission limit values

1.1. The emission limit values for air shall be regarded as being complied with if:

(a) none of the daily average values exceeds any of the emission limit values set out in point 1.1 of Part 3 or in Part 4 or calculated in accordance with Part 4;

(b) either none of the half-hourly average values exceeds any of the emission limit values set out in column A of the table under point 1.2 of Part 3 or, where relevant, 97 % of the half-hourly average values over the year do not exceed any of the emission limit values set out in column B of the table under point 1.2 of Part 3;

(c) none of the average values over the sampling period set out for heavy metals and dioxins and furans exceeds the emission limit values set out in points 1.3 and 1.4 of Part 3 or in Part 4 or calculated in accordance with Part 4;

(d) for carbon monoxide (CO):

(i) in case of waste incineration plants:

— at least 97 % of the daily average values over the year do not exceed the emission limit value set out in point 1.5(a) of Part 3; and,

— at least 95 % of all 10-minute average values taken in any 24-hour period or all of the half-hourly average values taken in the same period do not exceed the emission limit values set out in points 1.5(b) and (c) of Part 3; in case of waste incineration plants in which the gas resulting from the incineration process is raised to a temperature of at least 1 100 °C for at least two seconds, Member States may apply an evaluation period of 7 days for the 10-minute average values;

(ii) in case of waste co-incineration plants: the provisions of Part 4 are met.

1.2. The half-hourly average values and the 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods if no waste is being incinerated) from the measured values after having subtracted the value of the confidence interval specified in point 1.3 of Part 6. The daily average values shall be determined from those validated average values.

To obtain a valid daily average value no more than five half-hourly average values in any day shall be discarded due to malfunction or maintenance of the continuous measurement system. No more than ten daily average values per year shall be discarded due to malfunction or maintenance of the continuous measurement system.

1.3. The average values over the sampling period and the average values in the case of periodical measurements of HF, HCl and SO_2 shall be determined in accordance with the requirements of Articles 45(1)(e), 48(3) and point 1 of Part 6.

2. Water emission limit values

The emission limit values for water shall be regarded as being complied with if:

(a) for total suspended solids 95 % and 100 % of the measured values do not exceed the respective emission limit values as set out in Part 5;

(b) for heavy metals (Hg, Cd, Tl, As, Pb, Cr, Cu, Ni and Zn) no more than one measurement per year exceeds the emission limit values set out in Part 5; or, if the Member State provides for more than 20 samples per year, no more than 5 % of these samples exceed the emission limit values set out in Part 5;

(c) for dioxins and furans, the measurement results do not exceed the emission limit value set out in Part 5.

ANNEX VII

Technical provisions relating to installations and activities using organic solvents

PART 1

Activities

1. In each of the following points, the activity includes the cleaning of the equipment but not the cleaning of products unless specified otherwise.

2. Adhesive coating

Any activity in which an adhesive is applied to a surface, with the exception of adhesive coating and laminating associated with printing activities.

3. Coating activity

Any activity in which a single or multiple application of a continuous film of a coating is applied to:

(a) either of the following vehicles:

(i) new cars, defined as vehicles of category M1 in Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles [1] and of category N1 in so far as they are coated at the same installation as M1 vehicles;

(ii) truck cabins, defined as the housing for the driver, and all integrated housing for the technical equipment, of vehicles of categories N2 and N3 in Directive 2007/46/EC;

(iii) vans and trucks, defined as vehicles of categories N1, N2 and N3 in Directive 2007/46/EC, but not including truck cabins;

(iv) buses, defined as vehicles of categories M2 and M3 in Directive 2007/46/EC;

(v) trailers, defined in categories O1, O2, O3 and O4 in Directive 2007/46/EC;

(b) metallic and plastic surfaces including surfaces of airplanes, ships, trains, etc.;

(c) wooden surfaces;

(d) textile, fabric, film and paper surfaces;

(e) leather.

Coating activities do not include the coating of substrate with metals by electrophoretic and chemical spraying techniques. If the coating activity includes a step in which the same article is printed by whatever technique used, that printing step is considered part of the coating activity. However, printing activities operated as a separate activity are not included, but may be covered by Chapter V of this Directive if the printing activity falls within the scope thereof.

4. Coil coating

Any activity where coiled steel, stainless steel, coated steel, copper alloys or aluminium strip is coated with either a film forming or laminate coating in a continuous process.

[1] OJ L 263, 9.10.2007, p. 1.

5. Dry cleaning

Any industrial or commercial activity using volatile organic compounds in an installation to clean garments, furnishing and similar consumer goods with the exception of the manual removal of stains and spots in the textile and clothing industry.

6. Footwear manufacture

Any activity of producing complete footwear or parts thereof.

7. Manufacturing of coating mixtures, varnishes, inks and adhesives

The manufacture of the above final products, and of intermediates where carried out at the same site, by mixing of pigments, resins and adhesive materials with organic solvent or other carrier, including dispersion and predispersion activities, viscosity and tint adjustments and operations for filling the final product into its container.

8. Manufacturing of pharmaceutical products

The chemical synthesis, fermentation, extraction, formulation and finishing of pharmaceutical products and, where carried out at the same site, the manufacture of intermediate products.

9. Printing

Any reproduction activity of text and/or images in which, with the use of an image carrier, ink is transferred onto whatever type of surface. It includes associated varnishing, coating and laminating techniques. However, only the following sub-processes are subject to Chapter V:

(a) flexography – a printing activity using an image carrier of rubber or elastic photopolymers on which the printing areas are above the non-printing areas, using liquid inks which dry through evaporation;

(b) heatset web offset – a web-fed printing activity using an image carrier in which the printing and non-printing area are in the same plane, where web-fed means that the material to be printed is fed to the machine from a reel as distinct from separate sheets. The non-printing area is treated to attract water and thus reject ink. The printing area is treated to receive and transmit ink to the surface to be printed. Evaporation takes place in an oven where hot air is used to heat the printed material;

(c) laminating associated to a printing activity – the adhering together of two or more flexible materials to produce laminates;

(d) publication rotogravure – a rotogravure printing activity used for printing paper for magazines, brochures, catalogues or similar products, using toluene-based inks;

(e) rotogravure – a printing activity using a cylindrical image carrier in which the printing area is below the non-printing area, using liquid inks which dry through evaporation. The recesses are filled with ink and the surplus is cleaned off the non-printing area before the surface to be printed contacts the cylinder and lifts the ink from the recesses;

(f) rotary screen printing – a web-fed printing activity in which the ink is passed onto the surface to be printed by forcing it through a porous image carrier, in which the printing area is open and the non-printing area is sealed off, using liquid inks which dry only through evaporation. Web-fed means that the material to be printed is fed into the machine from a reel as distinct from separate sheets;

(g) varnishing – an activity by which a varnish or an adhesive coating for the purpose of later sealing the packaging material is applied to a flexible material.

10. Rubber conversion

Any activity of mixing, milling, blending, calendering, extrusion and vulcanisation of natural or synthetic rubber and any ancillary operations for converting natural or synthetic rubber into a finished product.

11. Surface cleaning

Any activity except dry cleaning using organic solvents to remove contamination from the surface of material including degreasing. A cleaning activity consisting of more than one step before or after any other activity shall be considered as one surface cleaning activity. This activity does not refer to the cleaning of the equipment but to the cleaning of the surface of products.

12. Vegetable oil and animal fat extraction and vegetable oil refining activities

Any activity to extract vegetable oil from seeds and other vegetable matter, the processing of dry residues to produce animal feed, the purification of fats and vegetable oils derived from seeds, vegetable matter and/or animal matter.

13. Vehicle refinishing

Any industrial or commercial coating activity and associated degreasing activities performing either of the following:

(a) the original coating of road vehicles as defined in Directive 2007/46/EC or part of them with refinishing-type materials, where this is carried out away from the original manufacturing line;

(b) the coating of trailers (including semi-trailers) (category O in Directive 2007/46/EC).

14. Winding wire coating

Any coating activity of metallic conductors used for winding the coils in transformers and motors, etc.

15. Wood impregnation

Any activity giving a loading of preservative in timber.

16. Wood and plastic lamination

Any activity to adhere together wood and/or plastic to produce laminated products.

PART 2

Thresholds and emission limit values

The emission limit values in waste gases shall be calculated at a temperature of 273,15 K, and a pressure of 101,3 kPa.

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
1	Heatset web offset printing (> 15)	15—25	100		30 (1)			(1) Solvent residue in finished product is not to be considered as part of fugitive emissions.
		> 25	20		30 (1)			
2	Publication rotogravure (> 25)		75	10	15			
3	Other rotogravure, flexography, rotary screen printing, laminating or varnishing units (> 15) rotary screen printing on textile/cardboard (> 30)	15—25	100		25			(1) Threshold for rotary screen printing on textile and on cardboard.
		> 25	100		20			
		> 30 (1)	100		20			
4	Surface cleaning using compounds specified in Article 59(5). (> 1)	1—5	20 (1)		15			(1) Limit value refers to mass of compounds in mg/Nm^3, and not to total carbon.
		> 5	20 (1)		10			
5	Other surface cleaning (> 2)	2—10	75 (1)		20 (1)			(1) Installations which demonstrate to the competent authority that the average organic solvent content of all cleaning material used does not exceed 30 % by weight are exempt from application of these values.
		> 10	75 (1)		15 (1)			
6	Vehicle coating (< 15) and vehicle refinishing	> 0,5	50 (1)		25			(1) Compliance in accordance with point 2 of Part 8 shall be demonstrated based on 15 minute average measurements.
7	Coil coating (> 25)		50 (1)	5	10			(1) For installations which use techniques which allow reuse of recovered solvents, the emission limit value shall be 150.

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
8	Other coating, including metal, plastic, textile ([5]), fabric, film and paper coating (> 5)	5—15 > 15	100 ([1]) ([4]) 50/75 ([2]) ([3]) ([4])		25 ([4]) 20 ([4])			([1]) Emission limit value applies to coating application and drying processes operated under contained conditions. ([2]) The first emission limit value applies to drying processes, the second to coating application processes. ([3]) For textile coating installations which use techniques which allow reuse of recovered solvents, the emission limit value applied to coating application and drying processes taken together shall be 150. ([4]) Coating activities which cannot be carried out under contained conditions (such as shipbuilding, aircraft painting) may be exempted from these values, in accordance with Article 59(3). ([5]) Rotary screen printing on textile is covered by activity No 3.
9	Winding wire coating (> 5)					10 g/kg ([1]) 5 g/kg ([2])		([1]) Applies for installations where average diameter of wire ≤ 0,1 mm. ([2]) Applies for all other installations.
10	Coating of wooden surfaces (> 15)	15—25 > 25	100 ([1]) 50/75 ([2])		25 20			([1]) Emission limit value applies to coating application and drying processes operated under contained conditions. ([2]) The first value applies to drying processes, the second to coating application processes.
11	Dry cleaning					20 g/kg ([1]) ([2])		([1]) Expressed in mass of solvent emitted per kilogram of product cleaned and dried. ([2]) The emission limit value in point 2 of Part 4 does not apply for this activity.

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
12	Wood impregnation (> 25)		100 (1)	45		11 kg/m^3		(1) Emission limit value does not apply for impregnation with creosote.
13	Coating of leather (> 10)	10—25 > 25 > 10 (1)				85 g/m^2 75 g/m^2 150 g/m^2		Emission limit values are expressed in grams of solvent emitted per m^2 of product produced. (1) For leather coating activities in furnishing and particular leather goods used as small consumer goods like bags, belts, wallets, etc.
14	Footwear manufacture (> 5)					25 g per pair		Total emission limit value is expressed in grams of solvent emitted per pair of complete footwear produced.
15	Wood and plastic lamination (> 5)					30 g/m^2		
16	Adhesive coating (> 5)	5—15 > 15	50 (1) 50 (1)	25 20				(1) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.
17	Manufacture of coating mixture, varnishes, inks and adhesives (> 100)	100—1 000 > 1 000	150 150	5 3		5 % of solvent input 3 % of solvent input		The fugitive emission limit value does not include solvent sold as part of a coatings mixture in a sealed container.
18	Rubber conversion (> 15)		20 (1)	25 (2)		25 % of solvent input		(1) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150. (2) The fugitive emission limit value does not include solvent sold as part of products or mixtures in a sealed container.

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission limit values (percentage of solvent input)		Total emission limit values		Special provisions
				New installations	Existing installations	New installations	Existing installations	
19	Vegetable oil and animal fat extraction and vegetable oil refining activities (> 10)					Animal fat: 1,5 kg/tonne Castor: 3 kg/tonne Rape seed: 1 kg/tonne Sunflower seed: 1 kg/tonne Soya beans (normal crush): 0,8 kg/tonne Soya beans (white flakes): 1,2 kg/tonne Other seeds and other vegetable matter: 3 kg/tonne ([1]) 1,5 kg/tonne ([2]) 4 kg/tonne ([3])		([1]) Total emission limit values for installations processing individual batches of seeds and other vegetable matter should be set by the competent authority on a case-by-case basis, applying the best available techniques. ([2]) Applies to all fractionation processes excluding de-gumming (the removal of gums from the oil). ([3]) Applies to de-gumming.
20	Manufacturing of pharmaceutical products (> 50)		20 ([1])	5 ([2])	15 ([2])	5 % of solvent input	15 % of solvent input	([1]) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150. ([2]) The fugitive emission limit value does not include solvent sold as part of products or mixtures in a sealed container.

PART 3

Emission limit values for installations of the vehicle coating industry

1. The total emission limit values are expressed in terms of grams of organic solvent emitted in relation to the surface area of product in square metres and in kilograms of organic solvent emitted in relation to the car body.

2. The surface area of any product dealt with in the table under point 3 is defined as the surface area calculated from the total electrophoretic coating area, and the surface area of any parts that might be added in successive phases of the coating process which are coated with the same coatings as those used for the product in question, or the total surface area of the product coated in the installation.

   The surface of the electrophoretic coating area is calculated using the following formula:

$$\frac{2 \times \text{total weight of product shell}}{\text{average thickness of metal sheet} \times \text{density of metal sheet}}$$

   This method shall also be applied for other coated parts made out of sheets.

   Computer aided design or other equivalent methods shall be used to calculate the surface area of the other parts added, or the total surface area coated in the installation.

3. The total emission limit values in the table below refer to all process stages carried out at the same installation from electrophoretic coating, or any other kind of coating process, through to the final wax and polish of topcoating inclusive, as well as solvent used in cleaning of process equipment, including spray booths and other fixed equipment, both during and outside of production time.

Activity (solvent consumption threshold in tonnes/year)	Production threshold (refers to annual production of coated item)	Total emission limit value	
		New installations	Existing installations
Coating of new cars (> 15)	> 5 000	45 g/m^2 or 1,3 kg/body + 33 g/m^2	60 g/m^2 or 1,9 kg/body + 41 g/m^2
	≤ 5 000 monocoque or > 3 500 chassis-built	90 g/m^2 or 1,5 kg/body + 70 g/m^2	90 g/m^2 or 1,5 kg/body + 70 g/m^2
		Total emission limit value (g/m^2)	
Coating of new truck cabins (> 15)	≤ 5 000	65	85
	> 5 000	55	75
Coating of new vans and trucks (> 15)	≤ 2 500	90	120
	> 2 500	70	90
Coating of new buses (> 15)	≤ 2 000	210	290
	> 2 000	150	225

4. Vehicle coating installations below the solvent consumption thresholds mentioned in the table under point 3 shall meet the requirements for the vehicle refinishing sector set out in Part 2.

PART 4

Emission limit values relating to volatile organic compounds with specific risk phrases

1. For emissions of the volatile organic compounds referred to in Article 58 where the mass flow of the sum of the compounds causing the labelling referred to in that Article is greater than, or equal to, 10 g/h, an emission limit value of 2 mg/Nm^3 shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

2. For emissions of halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351, where the mass flow of the sum of the compounds causing the hazard statements H341 or H351 is greater than, or equal to, 100 g/h, an emission limit value of 20 mg/Nm^3 shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

PART 5

Reduction scheme

1. The operator may use any reduction scheme, specially designed for his installation.

2. In the case of applying coatings, varnishes, adhesives or inks, the following scheme can be used. Where the following method is inappropriate, the competent authority may allow an operator to apply any alternative scheme achieving equivalent emission reductions to those achieved if the emission limit values of Parts 2 and 3 were to be applied. The design of the scheme shall take into account the following facts:

   (a) where substitutes containing little or no solvent are still under development, a time extension shall be given to the operator to implement his emission reduction plans;

   (b) the reference point for emission reductions should correspond as closely as possible to the emissions which would have resulted had no reduction action been taken.

3. The following scheme shall operate for installations for which a constant solid content of product can be assumed:

   (a) The annual reference emission is calculated as follows:

      (i) The total mass of solids in the quantity of coating and/or ink, varnish or adhesive consumed in a year is determined. Solids are all materials in coatings, inks, varnishes and adhesives that become solid once the water or the volatile organic compounds are evaporated.

      (ii) The annual reference emissions are calculated by multiplying the mass determined in (i) by the appropriate factor listed in the table below. Competent authorities may adjust these factors for individual installations to reflect documented increased efficiency in the use of solids.

Activity	Multiplication factor for use in item (a)(ii)
Rotogravure printing; flexography printing; laminating as part of a printing activity; varnishing as part of a printing activity; wood coating; coating of textiles, fabric film or paper; adhesive coating	4
Coil coating, vehicle refinishing	3
Food contact coating, aerospace coatings	2,33
Other coatings and rotary screen printing	1,5

   (b) The target emission is equal to the annual reference emission multiplied by a percentage equal to:

      (i) (the fugitive emission limit value + 15), for installations falling within item 6 and the lower threshold band of items 8 and 10 of Part 2,

      (ii) (the fugitive emission limit value + 5) for all other installations.

   (c) Compliance is achieved if the actual solvent emission determined from the solvent management plan is less than or equal to the target emission.

PART 6

Emission monitoring

1. Channels to which abatement equipment is connected, and which at the final point of discharge emit more than an average of 10 kg/h of total organic carbon, shall be monitored continuously for compliance.

2. In the other cases, Member States shall ensure that either continuous or periodic measurements are carried out. For periodic measurements at least three measurement values shall be obtained during each measurement exercise.

3. Measurements are not required in the case where end-of-pipe abatement equipment is not needed to comply with this Directive.

PART 7

Solvent management plan

1. Principles

The solvent management plan shall be used to:

(a) verify compliance as specified in Article 62;

(b) identify future reduction options;

(c) enable provision of information on solvent consumption, solvent emissions and compliance with the requirements of Chapter V to the public.

2. Definitions

The following definitions provide a framework for the mass balance exercise.

Inputs of organic solvents (I):

I1 The quantity of organic solvents or their quantity in mixtures purchased which are used as input into the process in the time frame over which the mass balance is being calculated.

I2 The quantity of organic solvents or their quantity in mixtures recovered and reused as solvent input into the process. The recycled solvent is counted every time it is used to carry out the activity.

Outputs of organic solvents (O):

O1 Emissions in waste gases.

O2 Organic solvents lost in water, taking into account waste water treatment when calculating O5.

O3 The quantity of organic solvents which remains as contamination or residue in products output from the process.

O4 Uncaptured emissions of organic solvents into air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.

O5 Organic solvents and/or organic compounds lost due to chemical or physical reactions (including those which are destroyed, by incineration or other waste gas or waste water treatments, or captured, as long as they are not counted under O6, O7 or O8).

O6 Organic solvents contained in collected waste.

O7 Organic solvents, or organic solvents contained in mixtures, which are sold or are intended to be sold as a commercially valuable product.

O8 Organic solvents contained in mixtures recovered for reuse but not as input into the process, as long as not counted under O7.

O9 Organic solvents released in other ways.

3. Use of the solvent management plan for verification of compliance.

The use made of the solvent management plan shall be determined by the particular requirement which is to be verified, as follows:

(a) verification of compliance with the reduction scheme as set out in Part 5, with a total emission limit value expressed in solvent emissions per unit product, or otherwise stated in Parts 2 and 3.

(i) for all activities using the reduction scheme as set out in Part 5, the solvent management plan shall be drawn up annually to determine the consumption (C). The consumption shall be calculated according to the following equation:

$$C = I1 - O8$$

A parallel exercise shall also be undertaken to determine solids used in coating in order to derive the annual reference emission and the target emission each year.

(ii) for assessing compliance with a total emission limit value expressed in solvent emissions per unit product or otherwise stated in Parts 2 and 3, the solvent management plan shall be drawn up annually to determine the emissions (E). The emissions shall be calculated according to the following equation:

$$E = F + O1$$

Where F is the fugitive emission as defined in point (b)(i). The emission figure shall then be divided by the relevant product parameter.

(iii) for assessing compliance with the requirements of point (b)(ii) of Article 59(6), the solvent management plan shall be drawn up annually to determine total emissions from all activities concerned, and that figure shall then be compared with the total emissions that would have resulted had the requirements of Parts 2, 3 and 5 been met for each activity separately.

(b) Determination of fugitive emissions for comparison with the fugitive emission limit values in Part 2:

(i) The fugitive emission shall be calculated according to one of the following equations;

$$F = I1 - O1 - O5 - O6 - O7 - O8$$

or

$$F = O2 + O3 + O4 + O9$$

F shall be determined either by direct measurement of the quantities or by an equivalent method or calculation, for instance by using the capture efficiency of the process.

The fugitive emission limit value is expressed as a proportion of the input, which shall be calculated according to the following equation:

$$I = I1 + I2$$

(ii) Determination of fugitive emissions shall be done by a short but comprehensive set of measurements and needs not be done again until the equipment is modified.

PART 8

Assessment of compliance with emission limit values in waste gases

1. In the case of continuous measurements the emission limit values shall be considered to be complied with if:

   (a) none of the arithmetic averages of all valid readings taken during any 24-hour period of operation of an installation or activity except start-up and shut-down operations and maintenance of equipment exceeds the emission limit values,

   (b) none of the hourly averages exceeds the emission limit values by more than a factor of 1,5.

2. In the case of periodic measurements the emission limit values shall be considered to be complied with if, in one monitoring exercise:

   (a) the average of all the measurement values does not exceed the emission limit values,

   (b) none of the hourly averages exceeds the emission limit value by more than a factor of 1,5.

3. Compliance with Part 4 shall be verified on the basis of the sum of the mass concentrations of the individual volatile organic compounds concerned. For all other cases, compliance shall be verified on the basis of the total mass of organic carbon emitted unless otherwise specified in Part 2.

4. Gas volumes may be added to the waste gas for cooling or dilution purposes where technically justified but shall not be considered when determining the mass concentration of the pollutant in the waste gas.

ANNEX VIII

Technical provisions relating to installations producing titanium dioxide

PART 1

Emission limit values for emissions into water

1. In case of installations using the sulphate process (as an annual average):

   550 kg of sulphate per tonne of titanium dioxide produced.

2. In case of installations using the chloride process (as an annual average):

   (a) 130 kg chloride per tonne of titanium dioxide produced using neutral rutile,

   (b) 228 kg chloride per tonne of titanium dioxide produced using synthetic rutile,

   (c) 330 kg chloride per tonne of titanium dioxide produced using slag. Installations discharging into salt water (estuarine, coastal, open sea) may be subject to an emission limit value of 450 kg chloride per tonne of titanium dioxide produced using slag.

3. For installations using the chloride process and using more than one type of ore, the emission limit values in point 2 shall apply in proportion to the quantity of the ores used.

PART 2

Emission limit values into air

1. The emission limit values which are expressed as concentrations in mass per cubic meter (Nm^3) shall be calculated at a temperature of 273,15 K, and a pressure of 101,3 kPa.

2. For dust: 50 mg/Nm^3 as an hourly average from major sources and 150 mg/Nm^3 as an hourly average from any other source.

3. For gaseous sulphur dioxide and trioxide discharged from digestion and calcination, including acid droplets calculated as SO_2 equivalent:

   (a) 6 kg per tonne of titanium dioxide produced as an annual average;

   (b) 500 mg/Nm^3 as an hourly average for plants for the concentration of waste acid.

4. For chlorine in the case of installations using the chloride process:

   (a) 5 mg/Nm^3 as a daily average;

   (b) 40 mg/Nm^3 at any time.

PART 3

Emission monitoring

The monitoring of emissions into air shall include at least the continuous monitoring of:

(a) gaseous sulphur dioxide and trioxide discharged from digestion and calcination from plants for the concentration of waste acid in installations using the sulphate process;

(b) chlorine from major sources within installations using the chloride process;

(c) dust from major sources.

ANNEX IX

PART A

Repealed Directives with their successive amendments

(referred to in Article 81)

Council Directive 78/176/EEC (OJ L 54, 25.2.1978, p. 19).	
Council Directive 83/29/EEC (OJ L 32, 3.2.1983, p. 28).	
Council Directive 91/692/EEC (OJ L 377, 31.12.1991, p. 48).	only Annex I, point (b)
Council Directive 82/883/EEC (OJ L 378, 31.12.1982, p. 1).	
Act of Accession of 1985	only Annex I, point X.1(o)
Act of Accession of 1994	only Annex I, point VIII.A.6
Council Regulation (EC) No 807/2003 (OJ L 122, 16.5.2003, p. 36).	only Annex III, point 34
Regulation (EC) No 219/2009 of the European Parliament and of the Council (OJ L 87, 31.3.2009, p. 109).	only Annex, point 3.1
Council Directive 92/112/EEC (OJ L 409, 31.12.1992, p. 11).	
Council Directive 1999/13/EC (OJ L 85, 29.3.1999, p. 1).	
Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).	only Annex I, point 17
Directive 2004/42/EC of the European Parliament and of the Council (OJ L 143, 30.4.2004, p. 87).	only Article 13(1)
Directive 2008/112/EC of the European Parliament and of the Council (OJ L 345, 23.12.2008, p. 68).	only Article 3
Directive 2000/76/EC of the European Parliament and of the Council (OJ L 332, 28.12.2000, p. 91).	
Regulation (EC) No 1137/2008 of the European Parliament and of the Council (OJ L 311, 21.11.2008, p. 1).	only Annex, point 4.8
Directive 2001/80/EC of the European Parliament and of the Council (OJ L 309, 27.11.2001, p. 1).	
Council Directive 2006/105/EC (OJ L 363, 20.12.2006, p. 368).	only Annex, part B, point 2
Directive 2009/31/EC of the European Parliament and of the Council (OJ L 140, 5.6.2009, p. 114).	only Article 33
Directive 2008/1/EC of the European Parliament and of the Council (OJ L 24, 29.1.2008, p. 8).	
Directive 2009/31/EC of the European Parliament and of the Council (OJ L 140, 5.6.2009, p. 114).	only Article 37

PART B

List of time-limits for transposition into national law and application

(referred to in Article 81)

Directive	Time-limit for transposition	Time-limit for application
78/176/EEC	25 February 1979	
82/883/EEC	31 December 1984	
92/112/EEC	15 June 1993	
1999/13/EC	1 April 2001	
2000/76/EC	28 December 2000	28 December 2002
		28 December 2005
2001/80/EC	27 November 2002	27 November 2004
2003/35/EC	25 June 2005	
2003/87/EC	31 December 2003	
2008/1/EC	30 October 1999 [1]	30 October 1999
		30 October 2007

[1] Directive 2008/1/EC is a codified version of Council Directive 96/61/EC of24 September 1996 concerning integrated pollution prevention and control (OJ L 257, 10.10.1996, p. 26) and the time-limits for transposition and application remain in force.

ANNEX X

Correlation Table

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
Article 1(1)	Article 1	Article 1					Article 66
—	—	—	—	—	—	—	Article 2
Article 1(2), point (a)			Article 2(2)				Article 3(2)
Article 1(2), point (b)					Article 3(1)		Article 3(37)
Article 1(2), points (c), (d) and (e)							—
—	—	—	—	—	—	—	Article 66
Article 2							Article 67
Article 3							Article 11, points (d) and (e)
Article 4			Article 4	Article 3, introductory wording and (1)	Article 4(1)		Article 4(1), first subparagraph
Article 5							Article 11, points (d) and (e)
Article 6							Article 11, points (d) and (e)
Article 7(1)		Article 10					Article 70(1) and 70(2), first sentence
Article 7(2) and (3)							—
—	—	—	—	—	—	—	Article 70(2), second sentence and 70(3)
Article 8(1)							—
Article 8(2)							Article 26(1), second subparagraph
Article 9							—
Article 10							—
Article 11							Article 12
Article 12							—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
Article 13(1)			Article 17(1), first subparagraph and 17(3), first subparagraph, first sentence	Article 11(1), first sentence and 11(2)			Article 72(1), first sentence
—	—	—	—	—	—	—	Article 72(1), second sentence
Article 13(2), (3) and (4)							—
Article 14							—
Article 15	Article 14	Article 12	Article 21	Article 15	Article 21	Article 18(1) and (3)	Article 80
Article 16	Article 15	Article 13	Article 23	Article 17	Article 23	Article 20	Article 84
Annex I							—
Annex II section A introductory wording and point 1							—
Annex II section A point 2							—
Annex II section B							—
	Article 2						—
	Article 3						—
	Article 4(1) and 4(2), first subparagraph						—
	Article 4(2), second subparagraph						—
	Article 4(3) and (4)						—
	Article 5						—
	Article 6						—
	Article 7						—
	Article 8						—
	Article 9						—
	Article 10						—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
	Article 11(1)			Article 13(1)	Article 17(1)		Article 75(1)
—	—	—	—	—	—	—	Article 75(2)
	Article 11(2)				Article 17(2)		—
	Article 11(3)						—
	Article 12						—
	Article 13						—
	Annex I						—
	Annex II						—
	Annex III						—
	Annex IV						—
	Annex V						—
		Article 2(1), introductory wording					—
		Article 2(1)(a), introductory wording					—
		Article 2(1)(a), first indent					Article 67, point (a)
		Article 2(1)(a), second indent					Article 67, point (b)
		Article 2(1)(a), third indent and 2(1)(b), third indent					Article 67, point (d)
		Article 2(1)(a), fourth, fifth, sixth and seventh indent					—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
		Article 2(1)(b), introductory wording and first, fourth, fifth, sixth and seventh indent					—
		Article 2(1)(b), second indent					Article 67, point (c)
		Article 2(1)(c)					—
		Article 2(2)					—
		Article 3					Article 67
		Article 4					Article 67
		Article 5					—
		Article 6, first paragraph, introductory wording					Article 68
		Article 6, first paragraph, point (a)					Annex VIII, Part 1, point 1
		Article 6, first paragraph, point (b)					Annex VIII, Part 1, point 2
		Article 6, second paragraph					Annex VIII, Part 1, point 3
		Article 7					—
		Article 8					—
		Article 9(1) introductory wording					Article 69(2)
		Article 9(1)(a), introductory wording					—
		Article 9(1)(a)(i)					Annex VIII, Part 2, point 2
		Article 9(1)(a)(ii)					Annex VIII, Part 2, point 3, introductory wording, and point 3(a)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
		Article 9(1)(a)(iii)					Article 69(1)
		Article 9(1)(a)(iv)					Annex VIII, Part 2, point 3(b)
		Article 9(1)(a)(v)					—
		Article 9(1)(b)					Annex VIII, Part 2, point 4
		Article 9(2) and (3)					—
		Article 11					Article 11, points (d) and (e)
		Annex					—
			Article 1				Article 1
			Article 2, introductory wording				Article 3, introductory wording
			Article 2(1)	Article 2(14)			Article 3(1)
			Article 2(3)	Article 2(1)			Article 3(3)
			Article 2(4)				—
			Article 2(5)	Article 2(9)	Article 3(8)	Article 2(1)	Article 3(4)
			Article 2(6), first sentence	Article 2(13)	Article 3(9)	Article 2(3), first part	Article 3(5)
			Article 2(6), second sentence				Article 15(1)
			Article 2(7)				Article 3(6)
			Article 2(8)	Article 2(5)			Article 71
			Article 2(9), first sentence	Article 2(7)	Article 3(12)		Article 3(7)
			Article 2(9), second sentence				Article 4(2), first subparagraph
—	—	—	—	—	—	—	Article 4(2), second subparagraph
—	—	—	—	—	—	—	Article 4(3)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 2(10)				—
—	—	—	—	—	—	—	Article 3(8)
			Article 2(11), first sentence				Article 3(9)
			Article 2(11), second sentence				Article 20(3)
			Article 2(12), first subparagraph and Annex IV, introductory wording				Article 3(10)
			Article 2(12), second subparagraph				Articles 14(5), point (a) and 14(6)
			Article 2(13)	Article 2(6)	Article 3(11)	Article 2(5)	Article 3(15)
			Article 2(14)				Article 3(16)
			Article 2(15)				Article 3(17)
—	—	—	—	—	—	—	Article 3(11) to (14), (18) to (23), (26) to (30) and (34) to (36)
			Article 3(1), introductory wording				Article 11, introductory wording
			Article 3(1), point (a)				Article 11, points (a) and (b)
			Article 3(1), point (b)				Article 11, point (c)
			Article 3(1), point (c)				Article 11, points (d) and (e)
			Article 3(1), point (d)				Article 11, point (f)
			Article 3(1), point (e)				Article 11, point (g)
			Article 3(1), point (f)				Article 11, point (h)
			Article 3(2)				—
			Article 5(1)				—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 5(2)				Article 80(1), second subparagraph
			Article 6(1), introductory wording				Article 12(1), first subparagraph, introductory wording
			Article 6(1), first subparagraph, points (a) to (d)				Article 12(1), first subparagraph, points (a) to (d)
—	—	—	—	—	—	—	Article 12(1), first subparagraph, point (e)
			Article 6(1), first subparagraph, point (e)				Article 12(1), first subparagraph, point (f)
			Article 6(1), first subparagraph, point (f)				Article 12(1), first subparagraph, point (g)
			Article 6(1), first subparagraph, point (g)				Article 12(1), first subparagraph, point (h)
			Article 6(1), first subparagraph, point (h)				Article 12(1), first subparagraph, point (i)
			Article 6(1), first subparagraph, point (i)				Article 12(1), first subparagraph, point (j)
			Article 6(1), first subparagraph, point (j)				Article 12(1), first subparagraph, point (k)
			Article 6(1), second subparagraph				Article 12(1), second subparagraph
			Article 6(2)				Article 12(2)
			Article 7				Article 5(2)
			Article 8, first paragraph		Article 4(3)		Article 5(1)
			Article 8, second paragraph				—
			Article 9(1), first part of sentence				Article 14(1), first subparagraph

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 9(1), second part of sentence				—
			Article 9(2)				Article 5(3)
			Article 9(3), first subparagraph, first and second sentence				Article 14(1), second subparagraph, introductory wording and points (a) and (b)
			Article 9(3), first subparagraph, third sentence				Article 14(2)
—	—	—	—	—	—	—	Article 14(3), (4), and (7)
—	—	—	—	—	—	—	Article 14(5), introductory wording and point (b) of first subparagraph and Article 14(5), second subparagraph
			Article 9(3), second subparagraph				—
			Article 9(3), third subparagraph				Article 9(1)
			Article 9(3), fourth subparagraph				Article 9(2)
			Article 9(3), fifth subparagraph				Article 9(3)
			Article 9(3), sixth subparagraph				Article 9(4)
—	—	—	—	—	—	—	Article 10
			Article 9(4), first part of first sentence				Article 15(2)
			Article 9(4), second part of first sentence				Article 15(4), first subparagraph
—	—	—	—	—	—	—	Article 15(4), second to fifth subparagraphs and Article 15(5)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 9(4), second sentence				Article 14(1), second subparagraph, point (g)
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (h)
—	—	—	—	—	—	—	Article 15(3)
—	—	—	—	—	—	—	Article 16
			Article 9(5), first subparagraph				Article 14(1), second subparagraph, point (c)(i)
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (c)(ii)
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (d)
			Article 9(5), second subparagraph				—
—	—	—	—	—	—	—	Article 14(1), second subparagraph, point (e)
			Article 9(6), first subparagraph				Article 14(1), second subparagraph, point (f)
			Article 9(6), second subparagraph				—
			Article 9(7)				—
			Article 9(8)				Article 6 and Article 17(1)
—	—	—	—	—	—	—	Article 17(2), (3) and (4)
			Article 10				Article 18
			Article 11				Article 19
			Article 12(1)				Article 20(1)
			Article 12(2), first sentence				Article 20(2), first subparagraph
			Article 12(2), second sentence				Article 20(2), second subparagraph
			Article 12(2), third sentence				—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 13(1)				Article 21(1)
—	—	—	—	—	—	—	Article 21(2), (3) and (4)
			Article 13(2), introductory wording				Article 21(5), introductory wording
			Article 13(2)(a)				Article 21(5), point (a)
			Article 13(2)(b)				—
			Article 13(2)(c)				Article 21(5), point (b)
			Article 13(2)(d)				—
—	—	—	—	—	—	—	Article 21(5), point (c)
—	—	—	—	—	—	—	Article 22
—	—	—	—	—	—	—	Article 23(1), first subparagraph
			Article 14, introductory wording and point (a)				Article 8(1)
			Article 14, point (b)				Article 7, point (a) and Article 14(1), point (d)(i)
—	—	—	—	—	—	—	Article 7, introductory wording and points (b) and (c)
—	—	—	—	—	—	—	Article 14(1), point (d)(ii)
			Article 14, point (c)				Article 23(1), second subparagraph
—	—	—	—	—	—	—	Article 23(2) to (6)
			Article 15(1), first subparagraph, introductory wording and points (a) and (b)	Article 12(1), first subparagraph			Article 24(1), first subparagraph, introductory wording and points (a) and (b)
			Article 15(1), first subparagraph, point (c)				Article 24(1), first subparagraph, point (c)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 15(1), second subparagraph				Article 24(1), second subparagraph
			Article 15(2)				Article 24(3)(b)
			Article 15(3)				Article 24(4)
			Article 15(4)				Article 24(2), introductory wording and points (a) and (b)
—	—	—	—	—	—	—	Article 24(2), points (c) to (f) and Article 24(3), introductory wording and point (a)
			Article 16				Article 25
			Article 17(1), second subparagraph				—
			Article 17(2), first subparagraph				Article 13(1)
—	—	—	—	—	—	—	Article 13(2) to (7)
			Article 17(2), second subparagraph				—
			Article 17(3), first subparagraph, second and third sentence	Article 11(1), second sentence			Article 72(2)
			Article 17(3), first subparagraph, fourth sentence				—
—	—	—	—	—	—	—	Article 72(3) and (4)
			Article 17(3), second subparagraph				—
			Article 17(3), third subparagraph	Article 11(3)			Article 73(1)
—	—	—	—	—	—	—	Article 73(2)
			Article 17(4)				—
—	—	—	—	—	—	—	Article 74
—	—	—	—	—	—	—	Article 27
			Article 18			Article 11	Article 26
			Article 19				—

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Article 20				—
			Article 21				Article 80(2)
			Article 22		Article 18	Article 17	Article 81
—	—	—	—	—	—	—	Article 82
			Article 23	Article 16	Article 22	Article 19	Article 83
—	—	—	—	—	—	—	Article 2(1)
			Annex I, paragraph 1 of introductory wording				Article 2(2)
			Annex I, paragraph 2 of introductory wording				Annex I, first subparagraph of introductory wording, first sentence
—	—	—	—	—	—	—	Annex I, first subparagraph of introductory wording, second sentence
—	—	—	—	—	—	—	Annex I, second subparagraph of introductory wording
			Annex I, points 1.1 to 1.3				Annex I, points 1.1 to 1.3
			Annex I, point 1.4				Annex I, point 1.4(a)
—	—	—	—	—	—	—	Annex I, point 1.4(b)
			Annex I, point 2				Annex I, point 2
			Annex I, point 3.1				Annex I, point 3.1(a) and (b)
—	—	—	—	—	—	—	Annex I, point 3.1(c)
			Annex I, points 3.2 to 3.5				Annex I, points 3.2 to 3.5
			Annex I, point 4				Annex I, point 4
			Annex I, point 5, introductory wording				—
			Annex I, point 5.1				Annex I, points 5.1(b), (f), (g), (i), (j) and 5.2(b)
—	—	—	—	—	—	—	Annex I, points 5.1(a), (c), (d), (e), (h), (k)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
			Annex I, point 5.2				Annex I, point 5.2(a)
			Annex I, point 5.3				Annex I, point 5.3(a)(i) and (ii)
—	—	—	—	—	—	—	Annex I, point 5.3(a)(iii) to (v) and 5.3(b)
			Annex I, point 5.4				Annex I, point 5.4
—	—	—	—	—	—	—	Annex I, points 5.5 and 5.6
			Annex I, points 6.1(a) and (b)				Annex I, points 6.1(a) and (b)
—	—	—	—	—	—	—	Annex I, point 6.1(c)
			Annex I, points 6.2 – 6.4(b)				Annex I, points 6.2 – 6.4(b)(ii)
—	—	—	—	—	—	—	Annex I, point 6.4 (b)(iii)
			Annex I, points 6.4(c) – 6.9				Annex I, points 6.4(c) – 6.9
—	—	—	—	—	—	—	Annex I, points 6.10 and 6.11
			Annex II				—
			Annex III				Annex II, 'Air', and 'Water', points 1 to 12
—	—	—	—	—	—	—	Annex II, 'Water', point 13
			Annex IV				Annex III
			Annex V				Annex IV
				Article 1			Article 56
				Article 2(2)			Article 57(1)

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
				Article 2(3)			—
				Article 2(4)			Article 63(1)
				Article 2(8)			Article 4(1), third subparagraph
				Article 2(10)			Article 57(3)
				Article 2(11)			Article 57(2)
				Article 2(12)			Article 57(4)
				Article 2(15)			Article 57(5)
				Article 2(16)			Article 3(44)
				Article 2(17)			Article 3(45)
				Article 2(18)			Article 3(46)
				Article 2(19)			—
				Article 2(20)			Article 3(47)
				Article 2(21)			Article 57(6)
				Article 2(22)			Article 57(7)
				Article 2(23)			Article 57(8)
				Article 2(24)			Article 57(9)
				Article 2(25)			Article 57(10)
				Article 2(26)			Article 57(11)
				Article 2(27)			—
				Article 2(28)			Article 63(1)
				Article 2(29)			—
				Article 2(30)			Article 57(12)
				Article 2(31)			Annex VII, Part 2, first sentence Annex VIII, Part 2, point 1
				Article 2(32)			—
				Article 2(33)			Article 57(13)
				Article 3(2)			Article 4(1), second subparagraph

Directive 78/176/EEC	Directive 82/883/EEC	Directive 92/112/EEC	Directive 2008/1/EC	Directive 1999/13/EC	Directive 2000/76/EC	Directive 2001/80/EC	This Directive
				Article 4(1), (2) and(3)			Article 4(1), first and second subparagraph
				Article 4(4)			Article 63(2)
				Article 5(1)			Article 59(1), first subparagraph, introductory wording
				Article 5(2)			Article 59(1) first subparagraph, points (a) and (b)
				Article 5(3), first subparagraph, point (a)			Article 59(2)
				Article 5(3), first subparagraph, point (b)			Article 59(3)
				Article 5(3), second subparagraph			Article 59(4)
—	—	—	—	—	—	—	Article 59(5)
				Article 5(4)			—
				Article 5(5)			Article 59(6)
				Article 5(6)			Article 58
				Article 5(7)			Annex VII, Part 4, point 1
				Article 5(8) first subparagraph			Annex VII, Part 4, point 2
				Article 5(8) second subparagraph			—
				Article 5(9)			—
				Article 5(10)			Article 59(7)
				Article 5(11), (12) and (13)			—
				Article 6			—
				Article 7(1), introductory wording and first, second, third and fourth indent			Article 64

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				Article 7(1), closing wording			—
				Article 7(2)			—
				Article 8(1)			Article 14(1), point (d), Article 60
—	—	—	—	—	—	—	Article 61
				Article 8(2)			Annex VII, Part 6, point 1
				Article 8(3)			Annex VII, Part 6, point 2
				Article 8(4)			Annex VII Part 6, point 3
				Article 8(5)			—
				Article 9(1), first subparagraph, introductory wording			Article 62, first subparagraph, introductory wording
				Article 9(1), first subparagraph, first, second and third indent			Article 62, first subparagraph, points (a), (b) and (c)
				Article 9(1), second subparagraph			Article 62, second subparagraph
				Article 9(1), third subparagraph			Annex VII, Part 8, point 4
				Article 9(2)			Article 63(3)
				Article 9(3)			Annex VII, Part 8, point 1
				Article 9(4)			Annex VII, Part 8, point 2
				Article 9(5)			Annex VII, Part 8, point 3
				Article 10	Article 4(9)		Article 8(2)
				Article 11(1), third to sixth sentences			—
				Article 12(1), second subparagraph			Article 65(1), first subparagraph
				Article 12(1), third subparagraph			Article 65(1), second subparagraph
				Article 12(2)			Article 65(2)

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				Article 12(3)			Article 65(3)
				Article 13(2) and (3)			—
				Article 14	Article 19	Article 16	Article 79
				Annex I, first and second sentence of introductory wording			Article 56
				Annex I, third sentence of introductory wording and list of activities			Annex VII, Part 1
				Annex IIA			Annex VII, Parts 2 and 3
				Annex IIA, Part II, last sentence of paragraph 6			—
				Annex IIB, point 1, first and second sentences			Article 59(1), first subparagraph, point (b)
				Annex IIB, point 1, third sentence			Article 59(1), second subparagraph
				Annex IIB, point 2			Annex VII, Part 5
				Annex IIB, point 2, second subparagraph (i) and table			—
				Annex III, point 1			—
				Annex III, point 2			Annex VII, Part 7, point 1
				Annex III, point 3			Annex VII, Part 7, point 2
				Annex III, point 4			Annex VII, Part 7, point 3
					Article 1, first paragraph		Article 42
					Article 1, second paragraph		—
					Article 2(1)		Article 42(1), first subparagraph

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—	—	—	—	—	—	—	Article 42(1), second to fifth subparagraphs
					Article 2(2), introductory wording		Article 42(2), introductory wording
					Article 2(2)(a), introductory wording		Article 42(2)(a), introductory wording
					Article 2(2)(a), points (i) to (v)		Article 42(2)(a), point (i)
					Article 2(2)(a), point (vi)		Article 42(2)(a), point (ii)
					Article 2(2)(a), point (vii)		Article 42(2)(a), point (iii)
					Article 2(2)(a), point (viii)		Article 42(2)(a), point (iv)
					Article 2(2)(b)		Article 42(2)(b)
					Article 3(2), first subparagraph		Article 3(38)
					Article 3(2), second subparagraph		—
					Article 3(3)		Article 3(39)
					Article 3(4), first subparagraph		Article 3(40)
					Article 3(4), second subparagraph		Article 42(1), third subparagraph
—	—	—	—	—	—	—	Article 42(1), fourth subparagraph
					Article 3(5), first subparagraph		Article 3(41)
					Article 3(5), second subparagraph		Article 42(1), fifth subparagraph
					Article 3(5), third subparagraph		Article 42(1), third subparagraph

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					Article 3(6)		Annex VI, Part 1, point (a)
					Article 3(7)		Article 3(42)
—	—	—	—	—	—	—	Annex VI, Part 1, point (b)
					Article 3(10)		Article 3(43)
					Article 3(13)		Article 43
					Article 4(2)		Article 44
					Article 4(4), introductory wording and points (a) and (b)		Article 45(1), introductory wording and points (a) and (b)
					Article 4(4), point (c)		Article 45(1), point (e)
					Article 4(5)		Article 45(2)
					Article 4(6)		Article 45(3)
					Article 4(7)		Article 45(4)
					Article 4(8)		Article 54
					Article 5		Article 52
					Article 6(1), first subparagraph		Article 50(1)
					Article 6(1), second subparagraph and 6(2)		Article 50(2)
					Article 6(1), third subparagraph		Article 50(3), first subparagraph
					Article 6(1), first part of fourth subparagraph		—
					Article 6(1), second part of fourth subparagraph		Article 50(3), second subparagraph
					Article 6(3)		Article 50(4)
					Article 6(4), first and second sentences of first subparagraph and Article 6(4), first and second sentences of second subparagraph		Article 51(1)

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					Article 6(4), third sentence of first subparagraph		Article 51(2)
—	—	—	—	—	Article 6(4), third sentence of second subparagraph	—	Article 51(3), first subparagraph
					Article 6(4), third subparagraph		Article 51(3), second subparagraph
					Article 6(4), fourth subparagraph		Article 51(4)
					Article 6(5), first part of sentence		—
					Article 6(5), second part of the sentence		Article 46(1)
					Article 6(6)		Article 50(5)
					Article 6(7)		Article 50(6)
					Article 6(8)		Article 50(7)
					Article 7(1) and Article 7(2), first subparagraph		Article 46(2), first subparagraph
					Article 7(2), second subparagraph		Article 46(2), second subparagraph
					Article 7(3) and Article 11(8), first subparagraph, introductory wording		Annex VI, Part 6, first part of point 2.7
					Article 7(4)		Article 46(2), second subparagraph
					Article 7(5)		—
					Article 8(1)		Article 45(1), point (c)
					Article 8(2)		Article 46(3)
					Article 8(3)		—
					Article 8(4), first subparagraph		Article 46(4), first subparagraph

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					Article 8(4), second subparagraph		Annex VI, Part 6, point 3.2
					Article 8(4), third subparagraph		—
					Article 8(4), fourth subparagraph		—
					Article 8(5)		Article 46(4), second and third subparagraph
					Article 8(6)		Article 45(1), points (c) and (d)
					Article 8(7)		Article 46(5)
					Article 8(8)		—
					Article 9, first subparagraph		Article 53(1)
					Article 9, second subparagraph		Article 53(2)
					Article 9, third subparagraph		Article 53(3)
					Article 10(1) and (2)		—
					Article 10(3), first sentence		Article 48(2)
					Article 10(3), second sentence		—
					Article 10(4)		Article 48(3)
					Article 10(5)		Annex VI, Part 6, second part of point 1.3
					Article 11(1)		Article 48(1)
					Article 11(2)		Annex VI, Part 6, point 2.1
					Article 11(3)		Annex VI, Part 6, point 2.2
					Article 11(4)		Annex VI, Part 6, point 2.3
					Article 11(5)		Annex VI, Part 6, point 2.4

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					Article 11(6)		Annex VI, Part 6, point 2.5, first subparagraph
—	—	—	—	—	—	—	Annex VI, Part 6, point 2.5, second subparagraph
					Article 11(7), first part of first sentence of first subparagraph		Annex VI, Part 6, point 2.6, introductory wording
					Article 11(7), second part of first sentence of first subparagraph		Annex VI, Part 6, point 2.6(a)
					Article 11(7), second sentence of first subparagraph		—
					Article 11(7), second subparagraph		—
					Article 11(7), point (a)		Annex VI, Part 6, point 2.6(b)
					Article 11(7), points (b) and (c)		—
					Article 11(7), point (d)		Annex VI, Part 6, point 2.6(c)
					Article 11(7), points (e) and (f)		—
					Article 11(8), first subparagraph, points (a) and (b)		Annex VI, Part 3, point 1
					Article 11(8), first subparagraph, point (c) and second subparagraph		Annex VI, Part 6, second subparagraph of point 2.7
					Article 11(8), first subparagraph, point (d)		Annex VI, Part 4, point 2.1, second subparagraph
					Article 11(9)		Article 48(4)
					Article 11(10)		Annex VI, Part 8, point 1.1
					Article 11(11)		Annex VI, Part 8, point 1.2
					Article 11(12)		Annex VI, Part 8, point 1.3

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					Article 11(13)		Article 48(5)
—	—	—	—	—	—	—	Article 49
					Article 11(14)		Annex VI, Part 6, point 3.1
					Article 11(15)		Article 45(1), point (e)
					Article 11(16)		Annex VI, Part 8, point 2
					Article 11(17)		Article 8(2), point (a)
					Article 12(1)		Article 55(1)
					Article 12(2), first and second sentence		Article 55(2)
					Article 12(2), third sentence		Article 55(3)
					Article 13(1)		Article 45(1), point (f)
					Article 13(2)		Article 47
					Article 13(3)		Article 46(6)
					Article 13(4)		Annex VI, Part 3, point 2
					Article 14		—
					Article 15		—
					Article 16		—
					Article 20		—
					Annex I		Annex VI, Part 2
					Annex II, first part (without numbering)		Annex VI, Part 4, point 1
					Annex II, point 1, introductory wording		Annex VI, Part 4, point 2.1
					Annex II, points 1.1 and 1.2		Annex VI, Part 4, points 2.2 and 2.3
—	—	—	—	—	—	—	Annex VI, Part 4, point 2.4
					Annex II, point 1.3		—
					Annex II, point 2.1		Annex VI, Part 4, point 3.1

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					Annex II, point 2.2		Annex VI, Part 4, point 3.3 and 3.4
					Annex II, point 3		Annex VI, Part 4, point 4
					Annex III		Annex VI, Part 6, point 1
					Annex IV, table		Annex VI, Part 5
					Annex IV, final sentence		—
					Annex V, point (a), table		Annex VI, Part 3, point 1.1
					Annex V, point (a), final sentences		—
					Annex V, point (b), table		Annex VI, Part 3, point 1.2
					Annex V, point (b), final sentence		—
					Annex V, point (c)		Annex VI, Part 3, point 1.3
					Annex V, point (d)		Annex VI, Part 3, point 1.4
					Annex V, point (e)		Annex VI, Part 3, point 1.5
					Annex V, point (f)		Annex VI, Part 3, point 3
					Annex VI		Annex VI, Part 7
						Article 1	Article 28, first subparagraph
						Article 2(2)	Annex V, Part 1, point 1 and Part 2, point 1, first subparagraph
—	—	—	—	—	—	—	Annex V, Part 1, point 1 and Part 2, point 1, second subparagraph
						Article 2(3) second part	Annex V, Part 1, point 1 and Part 2, point 1, first subparagraph

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—	—	—	—	—	—	—	Annex V, Part 1, point 1 and Part 2, point 1, second subparagraph
						Article 2(4)	—
						Article 2(6), first part	Article 3(24)
						Article 2(6), second part	Article 28, second subparagraph, point (j)
						Article 2(7), first subparagraph	Article 3(25)
						Article 2(7), second subparagraph, first sentence	—
						Article 2(7), second subparagraph, second sentence and points (a) to (i)	Article 28, second subparagraph and points (a) to (i)
						Article 2(7), second subparagraph, point (j)	—
						Article 2(7), third subparagraph	—
—	—	—	—	—	—	—	Article 29(1)
						Article 2(7), fourth subparagraph	Article 29(2)
—	—	—	—	—	—	—	Article 29(3)
						Article 2(8)	Article 3(32)
						Article 2(9)	—
						Article 2(10)	—
						Article 2(11)	Article 3(31)
						Article 2(12)	Article 3(33)
						Article 2(13)	—
						Article 3	—
						Article 4(1)	—
						Article 4(2)	—

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						Article 4(3)to 4(8)	
						Article 5(1)	Annex V, Part 1, point 2, second subparagraph
							Annex V, Part 1, point 2, first, third and fourth subparagraphs
						Article 5(2)	—
						Article 6	—
						Article 7(1)	Article 37
						Article 7(2)	Article 30(5)
						Article 7(3)	Article 30(6)
						Article 8(1)	Article 40(1)
						Article 8(2), first part of first subparagraph	Article 40(2), first part of first subparagraph
						Article 8(2), second part of first subparagraph	—
—	—	—	—	—	—	—	Article 40(2), second part of first subparagraph
—	—	—	—	—	—	—	Article 40(2), second subparagraph
—	—	—	—	—	—	—	Article 40(3)
—	—	—	—	—	—	—	Article 41
						Article 8(2), second subparagraph	—
						Article 8(3) and (4)	—
						Article 9	Article 30(1)
—	—	—	—	—	—	—	Article 30(2), (3) and (4)
						Article 9a	Article 36
						Article 10, first paragraph, first sentence	Article 30(7), first sentence

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—	—	—	—	—	—	—	Article 30(7), second sentence
—	—	—	—	—	—	—	Article 30(8) and (9)
—	—	—	—	—	—	—	Article 31 to 35
						Article 10, first paragraph, second sentence	—
						Article 10, second paragraph	—
						Article 12, first sentence	Article 38(1)
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						Article 13	Annex V, Part 3, third part of point 8
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						Article 15	—
						Article 18(2)	—
						Annex I	—
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						Annex III and IV	Annex V, point 2 of Part 1 and Part 2
						Annex V A	Annex V, Part 1, point 3
						Annex V B	Annex V, Part 2, point 3
						Annex VI A	Annex V, Part 1, points 4 and 6
—	—	—	—	—	—	—	Annex V, Part 1, point 5
						Annex VI B	Annex V, Part 2, points 4 and 6
—	—	—	—	—	—	—	Annex V, Part 2, point 5

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						Annex VII A	Annex V, Part 1, points 7 and 8
						Annex VII B	Annex V, Part 2, points 7 and 8
						Annex VIII A point 1	—
						Annex VIII A point 2	Annex V, Part 3, first part of point 1 and points 2, 3 and 5
—	—	—	—	—	—	—	Annex V, Part 3, second part of point 1
—	—	—	—	—	—	—	Annex V, Part 3, point 4
						Annex VIII A point 3	—
						Annex VIII A point 4	Annex V, Part 3, point 6
						Annex VIII A point 5	Annex V, Part 3, points 7 and 8
						Annex VIII A point 6	Annex V, Part 3, points 9 and 10
—	—	—	—	—	—	—	Annex V, Part 3, point 11
—	—	—	—	—	—	—	Annex V, Part 4
						Annex VIII B	—
						Annex VIII C	—
			Annex VI			Annex IX	Annex IX
			Annex VII			Annex X	Annex X

►B DIRECTIVE 2008/1/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2008 concerning integrated pollution prevention and control

(Codified version)

(Text with EEA relevance)

(OJ L 24, 29.1.2008, p. 8)

Amended by:

		Official Journal		
		No	page	date
►M1	Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009	L 140	114	5.6.2009

▼B

DIRECTIVE 2008/1/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 15 January 2008

concerning integrated pollution prevention and control

(Codified version)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee ([1]),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([2]),

Whereas:

(1) Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control ([3]) has been substantially amended several times ([4]). In the interests of clarity and rationality the said Directive should be codified.

(2) The objectives and principles of the Community's environment policy, as set out in Article 174 of the Treaty, consist in particular of preventing, reducing and as far as possible eliminating pollution by giving priority to intervention at source and ensuring prudent management of natural resources, in compliance with the 'polluter pays' principle and the principle of pollution prevention.

(3) The Fifth Environmental Action Programme, the broad outline of which was approved by the Council and the Representatives of the Governments of the Member States, meeting within the Council, in the Resolution of 1 February 1993 on a Community programme of policy and action in relation to the environment and sustainable development ([5]), accorded priority to integrated pollution control as an important part of the move towards a more sustainable balance between human activity and socioeconomic development, on the one hand, and the resources and regenerative capacity of nature, on the other.

(4) The implementation of an integrated approach to reduce pollution requires action at Community level in order to modify and supplement existing Community legislation concerning the prevention and control of pollution from industrial plants.

(5) Council Directive 84/360/EEC of 28 June 1984 on the combating of air pollution from industrial plants ([6]) introduced a general framework requiring authorisation prior to any operation or

([1]) OJ C 97, 28.4.2007, p. 12.
([2]) Opinion of the European Parliament of 19 June 2007 (not yet published in the Official Journal) and Council Decision of 17 December 2007.
([3]) OJ L 257, 10.10.1996, p. 26. Directive as last amended by Regulation (EC) No 166/2006 of the European Parliament and of the Council (OJ L 33, 4.2.2006, p. 1).
([4]) See Annex VI, Part A.
([5]) OJ C 138, 17.5.1993, p. 1.
([6]) OJ L 188, 16.7.1984, p. 20. Directive as amended by Directive 91/692/EEC (OJ L 377, 31.12.1991, p. 48).

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substantial modification of industrial installations which may cause air pollution.

(6) Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community ([1]) provides for an authorisation requirement for the discharge of those substances.

(7) Although Community legislation exists on the combating of air pollution and the prevention or minimisation of the discharge of dangerous substances into water, there is no comparable Community legislation aimed at preventing or minimising emissions into soil.

(8) Different approaches to controlling emissions into the air, water or soil separately may encourage the shifting of pollution between the various environmental media rather than protecting the environment as a whole.

(9) The objective of an integrated approach to pollution control is to prevent emissions into air, water or soil wherever this is practicable, taking into account waste management, and, where it is not, to minimise them in order to achieve a high level of protection for the environment as a whole.

(10) This Directive should establish a general framework for integrated pollution prevention and control. It should lay down the measures necessary to implement integrated pollution prevention and control in order to achieve a high level of protection for the environment as a whole. Application of the principle of sustainable development should be promoted by an integrated approach to pollution control.

(11) The provisions of this Directive should apply without prejudice to the provisions of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment ([2]). When information or conclusions obtained further to the application of that Directive have to be taken into consideration for the granting of authorisation, this Directive should not affect the implementation of Directive 85/337/EEC.

(12) Member States should take the necessary steps in order to ensure that the operator of the industrial activities referred to in this Directive is complying with the general principles of certain basic obligations. For that purpose it would suffice for the competent authorities to take those general principles into account when laying down the authorisation conditions.

(13) Some of the provisions adopted pursuant to this Directive must be applied to existing installations after 30 October 2007 and others had to be applied as from 30 October 1999.

(14) In order to tackle pollution problems more effectively and efficiently, environmental aspects should be taken into consideration by the operator. Those aspects should be communicated to the competent authority or authorities so that they can satisfy themselves, before granting a permit, that all appropriate preventive or pollution-control measures have been laid down. Very different application procedures may give rise to different levels of environmental protection and public awareness. Therefore, applications for permits under this Directive should include minimum data.

([1]) OJ L 64, 4.3.2006, p. 52.
([2]) OJ L 175, 5.7.1985, p. 40. Directive as last amended by Directive 2003/35/EC of the European Parliament and of the Council (OJ L 156, 25.6.2003, p. 17).

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(15) Full coordination of the authorisation procedure and conditions between competent authorities should make it possible to achieve the highest practicable level of protection for the environment as a whole.

(16) The competent authority or authorities should grant or amend a permit only when integrated environmental protection measures for air, water and land have been laid down.

(17) The permit should include all necessary measures to fulfil the authorisation conditions in order thus to achieve a high level of protection for the environment as a whole. Without prejudice to the authorisation procedure, those measures may also be the subject of general binding requirements.

(18) Emission limit values, parameters or equivalent technical measures should be based on the best available techniques, without prescribing the use of one specific technique or technology and taking into consideration the technical characteristics of the installation concerned, its geographical location and local environmental conditions. In all cases the authorisation conditions should lay down provisions on minimising long-distance or transfrontier pollution and ensure a high level of protection for the environment as a whole.

(19) It is for the Member States to determine how the technical characteristics of the installation concerned, its geographical location and local environmental conditions can, where appropriate, be taken into consideration.

(20) When an environmental quality standard requires more stringent conditions than those that can be achieved by using the best available techniques, supplementary conditions should in particular be required by the permit, without prejudice to other measures that may be taken to comply with the environmental quality standards.

(21) Because best available techniques will change with time, particularly in the light of technical advances, the competent authorities should monitor or be informed of such progress.

(22) Changes to an installation may give rise to pollution. The competent authority or authorities should therefore be notified of any change which might affect the environment. Substantial changes to plant must be subject to the granting of prior authorisation in accordance with this Directive.

(23) The authorisation conditions should be periodically reviewed and if necessary updated. Under certain conditions, they should in any event be re-examined.

(24) Effective public participation in the taking of decisions should enable the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken. In particular, the public should have access to information on the operation of installations and their potential effect on the environment, and, before any decision is taken, to information relating to applications for permits for new installations or substantial changes and to the permits themselves, their updating and the relevant monitoring data.

(25) Participation, including participation by associations, organisations and groups, in particular non-governmental organisations promoting environmental protection, should accordingly be fostered, including by promoting environmental education of the public.

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(26) On 25 June 1998 the Community signed the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Århus Convention). Among the objectives of the Århus Convention is the desire to guarantee rights of public participation in decision-making in environmental matters in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.

(27) The development and exchange of information at Community level about best available techniques should help to redress the technological imbalances in the Community, should promote the worldwide dissemination of limit values and techniques used in the Community and should help the Member States in the efficient implementation of this Directive.

(28) Reports on the implementation and effectiveness of this Directive should be drawn up regularly.

(29) This Directive is concerned with installations whose potential for pollution, and therefore transfrontier pollution, is significant. Transboundary consultation should be organised where applications relate to the licensing of new installations or substantial changes to installations which are likely to have significant negative environmental effects. The applications relating to such proposals or substantial changes should be available to the public of the Member State likely to be affected.

(30) The need for action may be identified at Community level to lay down emission limit values for certain categories of installation and pollutant covered by this Directive. The European Parliament and the Council should set such emission limit values in accordance with the provisions of the Treaty.

(31) The provisions of this Directive should apply without prejudice to Community provisions on health and safety at the workplace.

(32) This Directive should be without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law of the Directives as set out in Annex VI, Part B,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Purpose and scope

The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.

Article 2

Definitions

For the purposes of this Directive the following definitions shall apply:

1. ‘substance’ means any chemical element and its compounds, with the exception of radioactive substances within the meaning of Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation ([1]) and

([1]) OJ L 159, 29.6.1996, p. 1.

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genetically modified organisms within the meaning of Council Directive 90/219/EEC of 23 April 1990 on the contained use of genetically modified micro-organisms ([1]) and Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms ([2]);

2. 'pollution' means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into the air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment;

3. 'installation' means a stationary technical unit where one or more activities listed in Annex I are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;

4. 'existing installation' means an installation which on 30 October 1999, in accordance with legislation existing before that date, was in operation or was authorised or, in the view of the competent authority, was the subject of a full request for authorisation, provided that that installation was put into operation no later than 30 October 2000;

5. 'emission' means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into the air, water or land;

6. 'emission limit values' means the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time; emission limit values may also be laid down for certain groups, families or categories of substances, in particular for those listed in Annex III. The emission limit values for substances normally apply at the point where the emissions leave the installation, any dilution being disregarded when determining them; with regard to indirect releases into water, the effect of a water treatment plant may be taken into account when determining the emission limit values of the installation involved, provided that an equivalent level is guaranteed for the protection of the environment as a whole and provided this does not lead to higher levels of pollution in the environment, without prejudice to Directive 2006/11/EC or the Directives implementing it;

7. 'environmental quality standard' means the set of requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Community legislation;

8. 'competent authority' means the authority or authorities or bodies responsible under the legal provisions of the Member States for carrying out the obligations arising from this Directive;

9. 'permit' means that part or the whole of a written decision (or several such decisions) granting authorisation to operate all or part of an installation, subject to certain conditions which guarantee that the installation complies with the requirements of this Directive. A permit may cover one or more installations or parts of installations on the same site operated by the same operator;

([1]) OJ L 117, 8.5.1990, p. 1. Directive as last amended by Commission Decision 2005/174/EC (OJ L 59, 5.3.2005, p. 20).

([2]) OJ L 106, 17.4.2001, p. 1. Directive as last amended by Regulation (EC) No 1830/2003 (OJ L 268, 18.10.2003, p. 24).

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10. ‘change in operation’ means a change in the nature or functioning, or an extension, of the installation which may have consequences for the environment;

11. ‘substantial change’ means a change in operation which, in the opinion of the competent authority, may have significant negative effects on human beings or the environment; for the purposes of this definition, any change to or extension of an operation shall be deemed to be substantial if the change or extension in itself meets the thresholds, if any, set out in Annex I;

12. ‘best available techniques’ means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole:

    (a) ‘techniques’ shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;

    (b) ‘available techniques’ means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;

    (c) ‘best’ means most effective in achieving a high general level of protection of the environment as a whole.

    In determining the best available techniques, special consideration should be given to the items listed in Annex IV;

13. ‘operator’ means any natural or legal person who operates or controls the installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated;

14. ‘the public’ means one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups;

15. ‘the public concerned’ means the public affected or likely to be affected by, or having an interest in, the taking of a decision on the issuing or the updating of a permit or of permit conditions; for the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.

Article 3

General principles governing the basic obligations of the operator

1. Member States shall take the necessary measures to provide that the competent authorities ensure that installations are operated in such a way that:

(a) all the appropriate preventive measures are taken against pollution, in particular through application of the best available techniques;

(b) no significant pollution is caused;

(c) waste production is avoided in accordance with Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste ([1]); where waste is produced, it is recovered or, where that is technically and economically impossible,

([1]) OJ L 114, 27.4.2006, p. 9.

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it is disposed of while avoiding or reducing any impact on the environment;

(d) energy is used efficiently;

(e) the necessary measures are taken to prevent accidents and limit their consequences;

(f) the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

2. For the purposes of compliance with this Article, it shall be sufficient if Member States ensure that the competent authorities take account of the general principles set out in paragraph 1 when they determine the conditions of the permit.

Article 4

Permits for new installations

Member States shall take the necessary measures to ensure that no new installation is operated without a permit issued in accordance with this Directive, without prejudice to the exceptions provided for in Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants ([1]).

Article 5

Requirements for the granting of permits for existing installations

1. Member States shall take the necessary measures to ensure that the competent authorities see to it, by means of permits in accordance with Articles 6 and 8 or, as appropriate, by reconsidering and, where necessary, by updating the conditions, that existing installations operate in accordance with the requirements of Articles 3, 7, 9, 10 and 13, Article 14(a) and (b) and Article 15(2) not later than 30 October 2007, without prejudice to specific Community legislation.

2. Member States shall take the necessary measures to apply the provisions of Articles 1, 2, 11 and 12, Article 14(c), Article 15(1) and (3), Articles 17, 18 and Article 19(2) to existing installations as from 30 October 1999.

Article 6

Applications for permits

1. Member States shall take the necessary measures to ensure that an application to the competent authority for a permit includes a description of:

(a) the installation and its activities;

(b) the raw and auxiliary materials, other substances and the energy used in or generated by the installation;

(c) the sources of emissions from the installation;

(d) the conditions of the site of the installation;

(e) the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment;

([1]) OJ L 309, 27.11.2001, p. 1. Directive as last amended by Council Directive 2006/105/EC (OJ L 363, 20.12.2006, p. 368).

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(f) the proposed technology and other techniques for preventing or, where this not possible, reducing emissions from the installation;

(g) where necessary, measures for the prevention and recovery of waste generated by the installation;

(h) further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 3;

(i) measures planned to monitor emissions into the environment;

(j) the main alternatives, if any, studied by the applicant in outline.

An application for a permit shall also include a non-technical summary of the details referred to in points (a) to (j).

2. Where information supplied in accordance with the requirements provided for in Directive 85/337/EEC or a safety report prepared in accordance with Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances ([1]) or other information produced in response to other legislation fulfils any of the requirements of this Article, that information may be included in, or attached to, the application.

Article 7

Integrated approach to issuing permits

Member States shall take the measures necessary to ensure that the conditions of, and procedure for the grant of, the permit are fully coordinated where more than one competent authority is involved, in order to guarantee an effective integrated approach by all authorities competent for this procedure.

Article 8

Decisions

Without prejudice to other requirements laid down in national or Community legislation, the competent authority shall grant a permit containing conditions guaranteeing that the installation complies with the requirements of this Directive or, if it does not, shall refuse to grant the permit.

All permits granted and modified permits must include details of the arrangements made for air, water and land protection as referred to in this Directive.

Article 9

Conditions of the permit

1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 3 and 10 for the granting of permits in order to achieve a high level of protection for the environment as a whole by means of protection of the air, water and land.

2. In the case of a new installation or a substantial change where Article 4 of Directive 85/337/EEC applies, any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6 and 7 of that Directive shall be taken into consideration for the purposes of granting the permit.

3. The permit shall include emission limit values for polluting substances, in particular those listed in Annex III, likely to be emitted

([1]) OJ L 10, 14.1.1997, p. 13. Directive as last amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

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from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another (water, air and land). If necessary, the permit shall include appropriate requirements ensuring protection of the soil and ground water and measures concerning the management of waste generated by the installation. Where appropriate, limit values may be supplemented or replaced by equivalent parameters or technical measures.

For installations under point 6.6 in Annex I, emission limit values laid down in accordance with this paragraph shall take into account practical considerations appropriate to these categories of installation.

Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community ([1]) in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas unless it is necessary to ensure that no significant local pollution is caused.

For activities listed in Annex I to Directive 2003/87/EC, Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site.

Where necessary, the competent authorities shall amend the permit as appropriate.

The third, fourth and fifth subparagraphs shall not apply to installations temporarily excluded from the scheme for greenhouse gas emission allowance trading within the Community in accordance with Article 27 of Directive 2003/87/EC.

4. Without prejudice to Article 10, the emission limit values and the equivalent parameters and technical measures referred to in paragraph 3 shall be based on the best available techniques, without prescribing the use of any technique or specific technology, but taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions. In all circumstances, the conditions of the permit shall contain provisions on the minimisation of long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole.

5. The permit shall contain suitable release monitoring requirements, specifying measurement methodology and frequency, evaluation procedure and an obligation to supply the competent authority with data required for checking compliance with the permit.

For installations under point 6.6 in Annex I, the measures referred to in this paragraph may take account of costs and benefits.

6. The permit shall contain measures relating to conditions other than normal operating conditions. Thus, where there is a risk that the environment may be affected, appropriate provision shall be made for start-up, leaks, malfunctions, momentary stoppages and definitive cessation of operations.

The permit may also contain temporary derogations from the requirements of paragraph 4 if a rehabilitation plan approved by the competent authority ensures that these requirements will be met within six months and if the project leads to a reduction of pollution.

7. The permit may contain such other specific conditions for the purposes of this Directive as the Member State or competent authority may think fit.

8. Without prejudice to the obligation to implement a permit procedure pursuant to this Directive, Member States may prescribe certain requirements for certain categories of installations in general

([1]) OJ L 275, 25.10.2003, p. 32. Directive as amended by Directive 2004/101/EC (OJ L 338, 13.11.2004, p. 18).

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binding rules instead of including them in individual permit conditions, provided that an integrated approach and an equivalent high level of environmental protection as a whole are ensured.

Article 10

Best available techniques and environmental quality standards

Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall in particular be required in the permit, without prejudice to other measures which might be taken to comply with environmental quality standards.

Article 11

Developments in best available techniques

Member States shall ensure that the competent authority follows or is informed of developments in best available techniques.

Article 12

Changes by operators to installations

1. Member States shall take the necessary measures to ensure that the operator informs the competent authorities of any planned change in the operation. Where appropriate, the competent authorities shall update the permit or the conditions.

2. Member States shall take the necessary measures to ensure that no substantial change planned by the operator is made without a permit issued in accordance with this Directive. The application for a permit and the decision by the competent authority must cover those parts of the installation and those aspects listed in Article 6 that may be affected by the change. The relevant provisions of Article 3, Articles 6 to 10 and Article 15(1), (2) and (3) shall apply *mutatis mutandis*.

Article 13

Reconsideration and updating of permit conditions by the competent authority

1. Member States shall take the necessary measures to ensure that competent authorities periodically reconsider and, where necessary, update permit conditions.

2. The reconsideration shall be undertaken in any event where:

(a) the pollution caused by the installation is of such significance that the existing emission limit values of the permit need to be revised or new such values need to be included in the permit;

(b) substantial changes in the best available techniques make it possible to reduce emissions significantly without imposing excessive costs;

(c) the operational safety of the process or activity requires other techniques to be used;

(d) new provisions of Community or national legislation so dictate.

Article 14

Compliance with permit conditions

Member States shall take the necessary measures to ensure that:

(a) the conditions of the permit are complied with by the operator when operating the installation;

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(b) the operator regularly informs the competent authority of the results of the monitoring of releases and without delay of any incident or accident significantly affecting the environment;

(c) operators of installations afford the representatives of the competent authority all necessary assistance to enable them to carry out any inspections within the installation, to take samples and to gather any information necessary for the performance of their duties for the purposes of this Directive.

Article 15

Access to information and public participation in the permit procedure

1. Member States shall ensure that the public concerned is given early and effective opportunities to participate in the procedure for:

(a) issuing a permit for new installations;

(b) issuing a permit for any substantial change;

(c) updating of a permit or permit conditions for an installation in accordance with Article 13(2)(a).

The procedure set out in Annex V shall apply for the purposes of such participation.

2. The results of monitoring of releases as required under the permit conditions referred to in Article 9 and held by the competent authority shall be made available to the public.

3. Paragraphs 1 and 2 shall apply subject to the restrictions laid down in Article 4(1), (2) and (4) of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information ([1]).

4. When a decision has been taken, the competent authority shall inform the public in accordance with the appropriate procedures and shall make available to the public the following information:

(a) the content of the decision, including a copy of the permit and of any conditions and any subsequent updates; and

(b) having examined the concerns and opinions expressed by the public concerned, the reasons and considerations on which the decision is based, including information on the public participation process.

Article 16

Access to justice

1. Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of this Directive when:

(a) they have a sufficient interest; or

(b) they maintain the impairment of a right, where administrative procedural law of a Member State requires this as a precondition.

2. Member States shall determine at what stage the decisions, acts or omissions may be challenged.

3. What constitutes a sufficient interest and impairment of a right shall be determined by the Member States, consistently with the

([1]) OJ L 41, 14.2.2003, p. 26.

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objective of giving the public concerned wide access to justice. To this end, the interest of any non-governmental organisation promoting environmental protection and meeting any requirements under national law shall be deemed sufficient for the purpose of paragraph 1(a).

Such organisations shall also be deemed to have rights capable of being impaired for the purpose of paragraph 1(b).

4. The provisions of this Article shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

Any such procedure shall be fair, equitable, timely and not prohibitively expensive.

5. In order to further the effectiveness of the provisions of this Article, Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures.

Article 17

Exchange of information

1. With a view to exchanging information, Member States shall take the necessary measures to send the Commission every three years, and for the first time before 30 April 2001, the available representative data on the limit values laid down by specific category of activities in accordance with Annex I and, if appropriate, the best available techniques from which those values are derived in accordance with, in particular, Article 9. On subsequent occasions the data shall be supplemented in accordance with the procedures laid down in paragraph 3 of this Article.

2. The Commission shall organise an exchange of information between Member States and the industries concerned on best available techniques, associated monitoring, and developments in them.

Every three years the Commission shall publish the results of the exchanges of information.

3. At intervals of three years, and for the first time for the period 30 October 1999 to 30 October 2002 inclusive, Member States shall send information to the Commission on the implementation of this Directive in the form of a report. The report shall be drawn up on the basis of a questionnaire or outline drafted by the Commission in accordance with the procedure laid down in Article 6(2) of Council Directive 91/692/EEC of 23 December 1991 standardising and rationalising reports on the implementation of certain Directives relating to the environment ([1]). The questionnaire or outline shall be sent to the Member States six months before the start of the period covered by the report. The report shall be submitted to the Commission within nine months of the end of the three-year period covered by it.

The Commission shall publish a Community report on the implementation of the Directive within nine months of receiving the reports from the Member States.

The Commission shall submit the Community report to the European Parliament and to the Council, accompanied by proposals if necessary.

4. Member States shall establish or designate the authority or authorities which are to be responsible for the exchange of information under paragraphs 1, 2 and 3 and shall inform the Commission accordingly.

([1]) OJ L 377, 31.12.1991, p. 48. Directive as amended by Regulation (EC) No 1882/2003.

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Article 18

Transboundary effects

1. Where a Member State is aware that the operation of an installation is likely to have significant negative effects on the environment of another Member State, or where a Member State likely to be significantly affected so requests, the Member State in whose territory the application for a permit pursuant to Article 4 or Article 12(2) was submitted shall forward to the other Member State any information required to be given or made available pursuant to Annex V at the same time as it makes it available to its own nationals. Such information shall serve as a basis for any consultations necessary in the framework of the bilateral relations between the two Member States on a reciprocal and equivalent basis.

2. Within the framework of their bilateral relations, Member States shall see to it that in the cases referred to in paragraph 1 the applications are also made available for an appropriate period of time to the public of the Member State likely to be affected so that it will have the right to comment on them before the competent authority reaches its decision.

3. The results of any consultations pursuant to paragraphs 1 and 2 must be taken into consideration when the competent authority reaches a decision on the application.

4. The competent authority shall inform any Member State which has been consulted pursuant to paragraph 1 of the decision reached on the application and shall forward to it the information referred to in Article 15(4). That Member State shall take the measures necessary to ensure that that information is made available in an appropriate manner to the public concerned in its own territory.

Article 19

Community emission limit values

1. Where the need for Community action has been identified, on the basis, in particular, of the exchange of information provided for in Article 17, the European Parliament and the Council, acting on a proposal from the Commission, shall set emission limit values, in accordance with the procedures laid down in the Treaty, for:

(a) the categories of installations listed in Annex I except for the landfills covered by points 5,1 and 5,4 of that Annex,

and

(b) the polluting substances referred to in Annex III.

2. In the absence of Community emission limit values defined pursuant to this Directive, the relevant emission limit values contained in the Directives listed in Annex II and in other Community legislation shall be applied as minimum emission limit values pursuant to this Directive for the installations listed in Annex I.

3. Without prejudice to the requirements of this Directive, the technical requirements applicable for the landfills covered by points 5,1 and 5,4 of Annex I, have been fixed in Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste ([1]).

Article 20

Transitional provisions

1. The provisions of Directive 84/360/EEC, the provisions of Articles 4, 5 and 6(2) of Directive 2006/11/EC and the relevant provisions

([1]) OJ L 182, 16.7.1999, p. 1. Directive as amended by Regulation (EC) No 1882/2003.

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concerning authorisation systems in the Directives listed in Annex II shall apply, without prejudice to the exceptions provided for in Directive 2001/80/EC, to existing installations in respect of activities listed in Annex I until the measures required pursuant to Article 5 of this Directive have been taken by the competent authorities.

2. The relevant provisions concerning authorisation systems in the Directives listed in Annex II shall not, in respect of the activities listed in Annex I, apply to installations which are not existing installations within the meaning of point 4 of Article 2.

3. Directive 84/360/EEC shall be repealed on 30 October 2007.

Acting on a proposal from the Commission, the Council or the European Parliament and the Council shall, where necessary, amend the relevant provisions of the Directives listed in Annex II in order to adapt them to the requirements of this Directive before 30 October 2007.

Article 21

Communication

Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field covered by this Directive.

Article 22

Repeal

Directive 96/61/EC, as amended by the acts listed in Annex VI, Part A, is repealed, without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law of the Directives as set out in Annex VI, Part B.

References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex VII.

Article 23

Entry into force

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

Article 24

Addressees

This Directive is addressed to the Member States.

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ANNEX I

CATEGORIES OF INDUSTRIAL ACTIVITIES REFERRED TO IN ARTICLE 1

1. Installations or parts of installations used for research, development and testing of new products and processes are not covered by this Directive.

2. The threshold values given below generally refer to production capacities or outputs. Where one operator carries out several activities falling under the same subheading in the same installation or on the same site, the capacities of such activities are added together.

1. **Energy industries**

1.1. Combustion installations with a rated thermal input exceeding 50 MW.

1.2. Mineral oil and gas refineries.

1.3. Coke ovens.

1.4. Coal gasification and liquefaction plants.

2. **Production and processing of metals**

2.1. Metal ore (including sulphide ore) roasting or sintering installations.

2.2. Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour.

2.3. Installations for the processing of ferrous metals:

(a) hot-rolling mills with a capacity exceeding 20 tonnes of crude steel per hour;

(b) smitheries with hammers the energy of which exceeds 50 kilojoules per hammer, where the calorific power used exceeds 20 MW;

(c) application of protective fused metal coats with an input exceeding 2 tonnes of crude steel per hour.

2.4. Ferrous metal foundries with a production capacity exceeding 20 tonnes per day.

2.5. Installations:

(a) for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes;

(b) for the smelting, including the alloyage, of non-ferrous metals, including recovered products, (refining, foundry casting, etc.) with a melting capacity exceeding 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals.

2.6. Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m^3.

3. **Mineral industry**

3.1. Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or lime in rotary kilns with a production capacity exceeding 50 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day.

3.2. Installations for the production of asbestos and the manufacture of asbestos-based products.

3.3. Installations for the manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day.

3.4. Installations for melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day.

3.5. Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day,

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and/or with a kiln capacity exceeding 4 m^3 and with a setting density per kiln exceeding 300 kg/m^3.

4. **Chemical industry**

Production within the meaning of the categories of activities contained in this section means the production on an industrial scale by chemical processing of substances or groups of substances listed in points 4.1 to 4.6.

4.1. Chemical installations for the production of basic organic chemicals, such as:

(a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);

(b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins;

(c) sulphurous hydrocarbons;

(d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates;

(e) phosphorus-containing hydrocarbons;

(f) halogenic hydrocarbons;

(g) organometallic compounds;

(h) basic plastic materials (polymers, synthetic fibres and cellulose-based fibres);

(i) synthetic rubbers;

(j) dyes and pigments;

(k) surface-active agents and surfactants.

4.2. Chemical installations for the production of basic inorganic chemicals, such as:

(a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride;

(b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids;

(c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;

(d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate;

(e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide.

4.3. Chemical installations for the production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers).

4.4. Chemical installations for the production of basic plant health products and of biocides.

4.5. Installations using a chemical or biological process for the production of basic pharmaceutical products.

4.6. Chemical installations for the production of explosives.

5. **Waste management**

Without prejudice to Article 11 of Directive 2006/12/EC or Article 3 of Council Directive 91/689/EEC of 12 December 1991 on hazardous waste ([1]):

5.1. Installations for the disposal or recovery of hazardous waste as defined in the list referred to in Article 1(4) of Directive 91/689/EEC, as defined in Annexes II A and II B (operations R1, R5, R6, R8 and R9) to Directive

([1]) OJ L 377, 31.12.1991, p. 20. Directive as last amended by Regulation (EC) No 166/2006 of the European Parliament and of the Council (OJ L 33, 4.2.2006, p. 1).

▼B

2006/12/EC and in Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils ([1]), with a capacity exceeding 10 tonnes per day.

5.2. Installations for the incineration of municipal waste (household waste and similar commercial, industrial and institutional wastes) with a capacity exceeding 3 tonnes per hour.

5.3. Installations for the disposal of non-hazardous waste as defined in Annex II A to Directive 2006/12/EC under headings D8 and D9, with a capacity exceeding 50 tonnes per day.

5.4. Landfills receiving more than 10 tonnes per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste.

6. **Other activities**

6.1. Industrial plants for the production of:

(a) pulp from timber or other fibrous materials;

(b) paper and cardboard with a production capacity exceeding 20 tonnes per day.

6.2. Plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres or textiles where the treatment capacity exceeds 10 tonnes per day.

6.3. Plants for the tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day.

6.4. (a) Slaughterhouses with a carcase production capacity greater than 50 tonnes per day.

(b) Treatment and processing intended for the production of food products from:

— animal raw materials (other than milk) with a finished product production capacity greater than 75 tonnes per day,

— vegetable raw materials with a finished product production capacity greater than 300 tonnes per day (average value on a quarterly basis).

(c) Treatment and processing of milk, the quantity of milk received being greater than 200 tonnes per day (average value on an annual basis).

6.5. Installations for the disposal or recycling of animal carcases and animal waste with a treatment capacity exceeding 10 tonnes per day.

6.6. Installations for the intensive rearing of poultry or pigs with more than:

(a) 40 000 places for poultry;

(b) 2 000 places for production pigs (over 30 kg); or

(c) 750 places for sows.

6.7. Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

6.8. Installations for the production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation.

▼M1

6.9. Capture of CO_2 streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide ([2]).

([1]) OJ L 194, 25.7.1975, p. 23. Directive as last amended by Directive 2000/76/EC of the European Parliament and of the Council (OJ L 332, 28.12.2000, p. 91).

([2]) OJ L 140, 5.6.2009, p. 114.

▼B

ANNEX II

LIST OF THE DIRECTIVES REFERRED TO IN ARTICLES 19(2), (3) AND 20

1. Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos.
2. Council Directive 82/176/EEC of 22 March 1982 on limit values and quality objectives for mercury discharges by the chlor-alkali electrolysis industry.
3. Council Directive 83/513/EEC of 26 September 1983 on limit values and quality objectives for cadmium discharges.
4. Council Directive 84/156/EEC of 8 March 1984 on limit values and quality objectives for mercury discharges by sectors other than the chlor-alkali electrolysis industry.
5. Council Directive 84/491/EEC of 9 October 1984 on limit values and quality objectives for discharges of hexachlorocyclohexane.
6. Council Directive 86/280/EEC of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC.
7. Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste.
8. Council Directive 92/112/EEC of 15 December 1992 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.
9. Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.
10. Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.
11. Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste.
12. Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils.
13. Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
14. Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.

▼B

ANNEX III

INDICATIVE LIST OF THE MAIN POLLUTING SUBSTANCES TO BE TAKEN INTO ACCOUNT IF THEY ARE RELEVANT FOR FIXING EMISSION LIMIT VALUES

Air

1. Sulphur dioxide and other sulphur compounds.
2. Oxides of nitrogen and other nitrogen compounds.
3. Carbon monoxide.
4. Volatile organic compounds.
5. Metals and their compounds.
6. Dust.
7. Asbestos (suspended particulates, fibres).
8. Chlorine and its compounds.
9. Fluorine and its compounds.
10. Arsenic and its compounds.
11. Cyanides.
12. Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air.
13. Polychlorinated dibenzodioxins and polychlorinated dibenzofurans.

Water

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment.
2. Organophosphorus compounds.
3. Organotin compounds.
4. Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment.
5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances.
6. Cyanides.
7. Metals and their compounds.
8. Arsenic and its compounds.
9. Biocides and plant health products.
10. Materials in suspension.
11. Substances which contribute to eutrophication (in particular, nitrates and phosphates).
12. Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.).

▼B

ANNEX IV

Considerations to be taken into account generally or in specific cases when determining best available techniques, as defined in Article 2(12), bearing in mind the likely costs and benefits of a measure and the principles of precaution and prevention:

1. the use of low-waste technology;
2. the use of less hazardous substances;
3. the furthering of recovery and recycling of substances generated and used in the process and of waste, where appropriate;
4. comparable processes, facilities or methods of operation which have been tried with success on an industrial scale;
5. technological advances and changes in scientific knowledge and understanding;
6. the nature, effects and volume of the emissions concerned;
7. the commissioning dates for new or existing installations;
8. the length of time needed to introduce the best available technique;
9. the consumption and nature of raw materials (including water) used in the process and energy efficiency;
10. the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;
11. the need to prevent accidents and to minimise the consequences for the environment;
12. the information published by the Commission pursuant to Article 17(2), second subparagraph, or by international organisations.

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ANNEX V

PUBLIC PARTICIPATION IN DECISION-MAKING

1. The public shall be informed (by public notices or other appropriate means such as electronic media where available) of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:

   (a) the application for a permit or, as the case may be, the proposal for the updating of a permit or of permit conditions in accordance with Article 15(1), including the description of the elements listed in Article 6(1);

   (b) where applicable, the fact that a decision is subject to a national or transboundary environmental impact assessment or to consultations between Member States in accordance with Article 18;

   (c) details of the competent authorities responsible for taking the decision, those from which relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;

   (d) the nature of possible decisions or, where there is one, the draft decision;

   (e) where applicable, the details relating to a proposal for the updating of a permit or of permit conditions;

   (f) an indication of the times and places where, or means by which, the relevant information will be made available;

   (g) details of the arrangements for public participation and consultation made pursuant to point 5.

2. Member States shall ensure that, within appropriate time-frames, the following is made available to the public concerned:

   (a) in accordance with national legislation, the main reports and advice issued to the competent authority or authorities at the time when the public concerned were informed in accordance with point 1;

   (b) in accordance with the provisions of Directive 2003/4/EC, information other than that referred to in point 1 which is relevant for the decision in accordance with Article 8 and which only becomes available after the time the public concerned was informed in accordance with point 1.

3. The public concerned shall be entitled to express comments and opinions to the competent authority before a decision is taken.

4. The results of the consultations held pursuant to this Annex must be taken into due account in the taking of a decision.

5. The detailed arrangements for informing the public (for example by bill posting within a certain radius or publication in local newspapers) and consulting the public concerned (for example by written submissions or by way of a public inquiry) shall be determined by the Member States. Reasonable time-frames for the different phases shall be provided, allowing sufficient time for informing the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to the provisions of this Annex.

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ANNEX VI

PART A

Repealed Directive with its successive amendments (referred to in Article 22)

Council Directive 96/61/EC (OJ L 257, 10.10.1996, p. 26).	
Directive 2003/35/EC of the European Parliament and of the Council (OJ L 156, 25.6.2003, p. 17).	only Article 4 and Annex II
Directive 2003/87/EC of the European Parliament and of the Council (OJ L 275, 25.10.2003, p. 32).	only Article 26
Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).	only point (61) of Annex III
Regulation (EC) No 166/2006 of the European Parliament and of the Council (OJ L 33, 4.2.2006, p. 1).	only Article 21(2)

PART B

List of time-limits for transposition into national law (referred to in Article 22)

Directive	Time-limit for transposition
96/61/EC	30 October 1999
2003/35/EC	25 June 2005
2003/87/EC	31 December 2003

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ANNEX VII

CORRELATION TABLE

Directive 96/61/EC	This Directive
Article 1	Article 1
Article 2, introductory words	Article 2, introductory words
Article 2(1-9)	Article 2(1-9)
Article 2(10)(a)	Article 2(10)
Article 2(10)(b)	Article 2(11)
Article 2(11), first subparagraph, introductory wording	Article 2(12), first subparagraph, introductory wording
Article 2(11), first subparagraph, first indent	Article 2(12), first subparagraph, (a)
Article 2(11), first subparagraph, second indent	Article 2(12), first subparagraph, (b)
Article 2(11), first subparagraph, third indent	Article 2(12), first subparagraph, (c)
Article 2(11), second subparagraph	Article 2(12), second subparagraph
Article 2(12)	Article 2(13)
Article 2(13)	Article 2(14)
Article 2(14)	Article 2(15)
Article 3, first subparagraph	Article 3(1)
Article 3, second subparagraph	Article 3(2)
Article 4	Article 4
Article 5	Article 5
Article 6(1), first subparagraph, introductory wording	Article 6(1), first subparagraph, introductory wording
Article 6(1), first subparagraph, first to tenth indent	Article 6(1), first subparagraph, (a) to (j)
Article 6(1), second subparagraph	Article 6(1), second subparagraph
Article 6(2)	Article 6(2)
Article 7 to 12	Article 7 to 12
Article 13(1)	Article 13(1)
Article 13(2), introductory wording	Article 13(2), introductory wording
Article 13(2), first to fourth indent	Article 13(2)(a) to (d)
Article 14, introductory wording	Article 14, introductory wording
Article 14, first to third indent	Article 14(a) to (c)
Article 15(1), first subparagraph, introductory wording	Article 15(1), first subparagraph, introductory wording
Article 15(1), first subparagraph, first to third indent	Article 15(1), first subparagraph, (a) to (c)
Article 15(1), second subparagraph	Article 15(1), second subparagraph
Article 15(2)	Article 15(2)
Article 15(4)	Article 15(3)
Article 15(5)	Article 15(4)
Article 15a, first subparagraph, introductory and final words	Article 16(1)
Article 15a, first subparagraph, (a) and (b)	Article 16(1)(a) and (b)
Article 15a, second subparagraph	Article 16(2)

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Directive 96/61/EC	This Directive
Article 15a, third subparagraph, first and second sentence	Article 16(3), first subparagraph
Article 15a, third subparagraph, third sentence	Article 16(3), second subparagraph
Article 15a, fourth subparagraph	Article 16(4), first subparagraph
Article 15a, fifth subparagraph	Article 16(4), second subparagraph
Article 15a, sixth subparagraph	Article 16(5)
Article 16	Article 17
Article 17	Article 18
Article 18(1), introductory and final words	Article 19(1)
Article 18(1), first and second indent	Article 19(1)(a) and (b)
Article 18(2), first subparagraph	Article 19(2)
Article 18(2), second subparagraph	Article 19(3)
Article 19	—
Article 20(1)	Article 20(1)
Article 20(2)	Article 20(2)
Article 20(3), first subparagraph	Article 20(3), first subparagraph
Article 20(3), second subparagraph	—
Article 20(3), third subparagraph	Article 20(3), second subparagraph
Article 21(1)	—
Article 21(2)	Article 21
—	Article 22
Article 22	Article 23
Article 23	Article 24
Annex I	Annex I
Annex II	Annex II
Annex III	Annex III
Annex IV	Annex IV
Annex V	Annex V
—	Annex VI
—	Annex VII

►B DIRECTIVE 2001/80/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants

(OJ L 309, 27.11.2001, p. 1)

Corrected by:

►C1 Corrigendum, OJ L 319, 23.11.2002, p. 30 (2001/80/EC)

▼B

DIRECTIVE 2001/80/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 23 October 2001

on the limitation of emissions of certain pollutants into the air from large combustion plants

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission ([1]),

Having regard to the Opinion of the Economic and Social Committee ([2]),

Having consulted the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([3]), in the light of the joint text approved by the Conciliation Committee on 2 August 2001,

Whereas:

(1) Council Directive 88/609/EEC of 24 November 1988 on the limitation of emissions of certain pollutants into the air from large combustion plants ([4]) has contributed to the reduction and control of atmospheric emissions from large combustion plants. It should be recast in the interests of clarity.

(2) The Fifth Environmental Action Programme ([5]) sets as objectives that the critical loads and levels of certain acidifying pollutants such as sulphur dioxide (SO_2) and nitrogen oxides (NO_x) should not be exceeded at any time and, as regards air quality, that all people should be effectively protected against recognised health risks from air pollution.

(3) All Member States have signed the Gothenburg Protocol of 1 December 1999 to the 1979 Convention of the United Nations Economic Commission for Europe (UNECE) on long-range transboundary air pollution to abate acidification, eutrophication and ground-level ozone, which includes, *inter alia*, commitments to reduce emissions of sulphur dioxide and oxides of nitrogen.

(4) The Commission has published a Communication on a Community strategy to combat acidification in which the revision of Directive 88/609/EEC was identified as being an integral component of that strategy with the long term aim of reducing emissions of sulphur dioxide and nitrogen oxides sufficiently to bring depositions and concentrations down to levels below the critical loads and levels.

(5) In accordance with the principle of subsidiarity as set out in Article 5 of the Treaty, the objective of reducing acidifying emissions from large combustion plants cannot be sufficiently achieved by the Member States acting individually and unconcerted action offers no guarantee of achieving the desired objective; in view of the need to reduce acidifying emissions

([1]) OJ C 300, 29.9.1998, p. 6, OJ C 212 E, 25.7.2000, p. 36.
([2]) OJ C 101, 12.4.1999, p. 55.
([3]) Opinion of the European Parliament of 14 April 1999 (OJ C 219, 30.7.1999, p. 175), Council Common Position of 9 November 2000 (OJ C 375, 28.12.2000, p. 12) and Decision of the European Parliament of 14 March 2001 (not yet published in the Official Journal). Decision of the European Parliament of 20 September 2001 and Decision of the Council of 27 September 2001.
([4]) OJ L 336, 7.12.1988, p. 1. Directive as last amended by Council Directive 94/66/EC (OJ L 337, 24.12.1994, p. 83).
([5]) OJ C 138, 17.5.1993, p. 1.

▼B

across the Community, it is more effective to take action at Community level.

(6) Existing large combustion plants are significant contributors to emissions of sulphur dioxide and nitrogen oxides in the Community and it is necessary to reduce these emissions. It is therefore necessary to adapt the approach to the different characteristics of the large combustion plant sector in the Member States.

(7) Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control [1] sets out an integrated approach to pollution prevention and control in which all the aspects of an installation's environmental performance are considered in an integrated manner; combustion installations with a rated thermal input exceeding 50 MW are included within the scope of that Directive; pursuant to Article 15(3) of that Directive an inventory of the principal emissions and sources responsible is to be published every three years by the Commission on the basis of data supplied by the Member States. Pursuant to Article 18 of that Directive, acting on a proposal from the Commission, the Council will set emission limit values in accordance with the procedures laid down in the Treaty for which the need for Community action has been identified, on the basis, in particular, of the exchange of information provided for in Article 16 of that Directive.

(8) Compliance with the emission limit values laid down by this Directive should be regarded as a necessary but not sufficient condition for compliance with the requirements of Directive 96/61/EC regarding the use of best available techniques. Such compliance may involve more stringent emission limit values, emission limit values for other substances and other media, and other appropriate conditions.

(9) Industrial experience in the implementation of techniques for the reduction of polluting emissions from large combustion plants has been acquired over a period of 15 years.

(10) The Protocol on heavy metals to the UNECE Convention on long-range transboundary air pollution recommends the adoption of measures to reduce heavy metals emitted by certain installations. It is known that benefits from reducing dust emissions by dust abatement equipment will provide benefits on reducing particle–bound heavy metal emissions.

(11) Installations for the production of electricity represent an important part of the large combustion plant sector.

(12) Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity [2] is intended *inter alia* to have the effect of distributing new production capacity among new arrivals in the sector.

(13) The Community is committed to a reduction of carbon dioxide emissions. Where it is feasible the combined production of heat and electricity represents a valuable opportunity for significantly improving overall efficiency in fuel use.

(14) A significant increase in the use of natural gas for producing electricity is already underway and is likely to continue, in particular through the use of gas turbines.

(15) In view of the increase in energy production from biomass, specific emission standards for this fuel are justified.

(16) The Council Resolution of 24 February 1997 on a Community strategy for waste management [3] emphasises the need for promoting waste recovery and states that appropriate emission

[1] OJ L 257, 10.10.1996, p. 26.
[2] OJ L 27, 30.1.1997, p. 20.
[3] OJ C 76, 11.3.1997, p. 1.

▼B

standards should apply to the operation of facilities in which waste is incinerated in order to ensure a high level of protection for the environment.

(17) Industrial experience has been gained concerning techniques and equipment for the measurement of the principal pollutants emitted by large combustion plants; the European Committee for Standardisation (CEN) has undertaken work with the aim of providing a framework securing comparable measurement results within the Community and guaranteeing a high level of quality of such measurements.

(18) There is a need to improve knowledge concerning the emission of the principal pollutants from large combustion plants. In order to be genuinely representative of the level of pollution of an installation, such information should also be associated with knowledge concerning its energy consumption.

(19) This Directive is without prejudice to the time limits within which the Member States must transpose and implement Directive 88/609/EEC,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

This Directive shall apply to combustion plants, the rated thermal input of which is equal to or greater than 50 MW, irrespective of the type of fuel used (solid, liquid or gaseous).

Article 2

For the purpose of this Directive:

(1) 'emission' means the discharge of substances from the combustion plant into the air;

(2) 'waste gases' means gaseous discharges containing solid, liquid or gaseous emissions; their volumetric flow rates shall be expressed in cubic metres per hour at standard temperature (273 K) and pressure (101,3 kPa) after correction for the water vapour content, hereinafter referred to as (Nm^3/h);

(3) 'emission limit value' means the permissible quantity of a substance contained in the waste gases from the combustion plant which may be discharged into the air during a given period; it shall be calculated in terms of mass per volume of the waste gases expressed in mg/Nm^3, assuming an oxygen content by volume in the waste gas of 3 % in the case of liquid and gaseous fuels, 6 % in the case of solid fuels and 15 % in the case of gas turbines;

(4) 'rate of desulphurisation' means the ratio of the quantity of sulphur which is not emitted into the air at the combustion plant site over a given period to the quantity of sulphur contained in the fuel which is introduced into the combustion plant facilities and which is used over the same period;

(5) 'operator' means any natural or legal person who operates the combustion plant, or who has or has been delegated decisive economic power over it;

(6) 'fuel' means any solid, liquid or gaseous combustible material used to fire the combustion plant with the exception of waste covered by Council Directive 89/369/EEC of 8 June 1989 on the prevention of air pollution from new municipal waste incineration plants ([1]), Council Directive 89/429/EEC of 21 June 1989 on the reduction of air pollution from existing municipal waste incineration plants ([2]), and Council Directive 94/67/EC of 16 December

([1]) OJ L 163, 14.6.1989, p. 32.
([2]) OJ L 203, 15.7.1989, p. 50.

▼B

1994 concerning the incineration of hazardous waste [1] or any subsequent Community act repealing and replacing one or more of these Directives;

(7) 'combustion plant' means any technical apparatus in which fuels are oxidised in order to use the heat thus generated.

This Directive shall apply only to combustion plants designed for production of energy with the exception of those which make direct use of the products of combustion in manufacturing processes. In particular, this Directive shall not apply to the following combustion plants:

(a) plants in which the products of combustion are used for the direct heating, drying, or any other treatment of objects or materials e.g. reheating furnaces, furnaces for heat treatment;

(b) post-combustion plants i.e. any technical apparatus designed to purify the waste gases by combustion which is not operated as an independent combustion plant;

(c) facilities for the regeneration of catalytic cracking catalysts;

(d) facilities for the conversion of hydrogen sulphide into sulphur;

(e) reactors used in the chemical industry;

(f) coke battery furnaces;

(g) cowpers;

(h) any technical apparatus used in the propulsion of a vehicle, ship or aircraft;

(i) gas turbines used on offshore platforms;

(j) gas turbines licensed before 27 November 2002 or which in the view of the competent authority are the subject of a full request for a licence before 27 November 2002 provided that the plant is put into operation no later than 27 November 2003 without prejudice to Article 7(1) and Annex VIII(A) and (B);

Plants powered by diesel, petrol and gas engines shall not be covered by this Directive.

Where two or more separate new plants are installed in such a way that, taking technical and economic factors into account, their waste gases could, in the judgement of the competent authorities, be discharged through a common stack, the combination formed by such plants shall be regarded as a single unit;

(8) 'multi-fuel firing unit' means any combustion plant which may be fired simultaneously or alternately by two or more types of fuel;

(9) 'new plant' means any combustion plant for which the original construction licence or, in the absence of such a procedure, the original operating licence was granted on or after 1 July 1987;

(10) 'existing plant' means any combustion plant for which the original construction licence or, in the absence of such a procedure, the original operating licence was granted before 1 July 1987;

(11) 'biomass' means products consisting of any whole or part of a vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content and the following waste used as a fuel:

(a) vegetable waste from agriculture and forestry;

(b) vegetable waste from the food processing industry, if the heat generated is recovered;

(c) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered;

(d) cork waste;

[1] OJ L 365, 31.12.1994, p. 34.

▼B

(e) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes in particular such wood waste originating from construction and demolition waste;

(12) 'gas turbine' means any rotating machine which converts thermal energy into mechanical work, consisting mainly of a compressor, a thermal device in which fuel is oxidised in order to heat the working fluid, and a turbine.

(13) 'Outermost Regions' means the French Overseas Departments with regard to France, the Azores and Madeira with regard to Portugal and the Canary Islands with regard to Spain.

Article 3

1. Not later than 1 July 1990 Member States shall draw up appropriate programmes for the progressive reduction of total annual emissions from existing plants. The programmes shall set out the timetables and the implementing procedures.

2. In accordance with the programmes mentioned in paragraph 1, Member States shall continue to comply with the emission ceilings and with the corresponding percentage reductions laid down for sulphur dioxide in Annex I, columns 1 to 6, and for oxides of nitrogen in Annex II, columns 1 to 4, by the dates specified in those Annexes, until the implementation of the provisions of Article 4 that apply to existing plants.

3. When the programmes are being carried out, Member States shall also determine the total annual emissions in accordance with Annex VIII(C).

4. 4. If a substantial and unexpected change in energy demand or in the availability of certain fuels or certain generating installations creates serious technical difficulties for the implementation by a Member State of its programme drawn up under paragraph 1, the Commission shall, at the request of the Member State concerned and taking into account the terms of the request, take a decision to modify, for that Member State, the emission ceilings and/or the dates set out in Annexes I and II and communicate its decision to the Council and to the Member States. Any Member State may within three months refer the decision of the Commission to the Council. The Council, acting by a qualified majority, may within three months take a different decision.

Article 4

1. Without prejudice to Article 17 Member States shall take appropriate measures to ensure that all licences for the construction or, in the absence of such a procedure, for the operation of new plants which in the view of the competent authority are the subject of a full request for a licence before 27 November 2002, provided that the plant is put into operation no later than 27 November 2003 contain conditions relating to compliance with the emission limit values laid down in part A of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust.

2. Member States shall take appropriate measures to ensure that all licences for the construction or, in the absence of such a procedure, for the operation of new plants, other than those covered by paragraph 1, contain conditions relating to compliance with the emission limit values laid down in part B of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust.

▼B

3. Without prejudice to Directive 96/61/EC and Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management ([1]), Member States shall, by 1 January 2008 at the latest, achieve significant emission reductions by:

(a) taking appropriate measures to ensure that all licences for the operation of existing plants contain conditions relating to compliance with the emission limit values established for new plants referred to in paragraph 1; or

(b) ensuring that existing plants are subject to the national emission reduction plan referred to in paragraph 6;

and, where appropriate, applying Articles 5, 7 and 8.

4. Without prejudice to Directives 96/61/EC and 96/62/EC, existing plants may be exempted from compliance with the emission limit values referred to in paragraph 3 and from their inclusion in the national emission reduction plan on the following conditions:

(a) the operator of an existing plant undertakes, in a written declaration submitted by 30 June 2004 at the latest to the competent authority, not to operate the plant for more than 20 000 operational hours starting from 1 January 2008 and ending no later than 31 December 2015;

(b) the operator is required to submit each year to the competent authority a record of the used and unused time allowed for the plants' remaining operational life.

5. Member States may require compliance with emission limit values and time limits for implementation which are more stringent than those set out in paragraphs 1, 2, 3 and 4 and in Article 10. They may include other pollutants, and they may impose additional requirements or adaptation of plant to technical progress.

6. Member States may, without prejudice to this Directive and Directive 96/61/EC, and taking into consideration the costs and benefits as well as their obligations under Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants ([2]) and Directive 96/62/EC, define and implement a national emission reduction plan for existing plants, taking into account, *inter alia*, compliance with the ceilings as set out in Annexes I and II.

The national emission reduction plan shall reduce the total annual emissions of nitrogen oxides (NO_x), sulphur dioxide (SO_2) and dust from existing plants to the levels that would have been achieved by applying the emission limit values referred to in paragraph 3 to the existing plants in operation in the year 2000, (including those existing plants undergoing a rehabilitation plan in 2000, approved by the competent authority, to meet emission reductions required by national legislation) on the basis of each plant's actual annual operating time, fuel used and thermal input, averaged over the last five years of operation up to and including 2000.

The closure of a plant included in the national emission reduction plan shall not result in an increase in the total annual emissions from the remaining plants covered by the plan.

The national emission reduction plan may under no circumstances exempt a plant from the provisions laid down in relevant Community legislation, including inter alia Directive 96/61/EC.

The following conditions shall apply to national emission reduction plans:

(a) the plan shall comprise objectives and related targets, measures and timetables for reaching these objectives and targets, and a monitoring mechanism;

([1]) OJ L 296, 21.11.1996, p. 55.
([2]) See p. 22 of this Edition of the Official Journal.

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(b) Member States shall communicate their national emission reduction plan to the Commission no later than 27 November 2003;

(c) within six months of the communication referred to in point (b) the Commission shall evaluate whether or not the plan meets the requirements of this paragraph. When the Commission considers that this is not the case, it shall inform the Member State and within the subsequent three months the Member State shall communicate any measures it has taken in order to ensure that the requirements of this paragraph are met;

(d) the Commission shall, no later than 27 November 2002, develop guidelines to assist Member States in the preparation of their plans.

7. Not later than 31 December 2004 and in the light of progress towards protecting human health and attaining the Community's environmental objectives for acidification and for air quality pursuant to Directive 96/62/EC, the Commission shall submit a report to the European Parliament and the Council in which it shall assess:

(a) the need for further measures;

(b) the amounts of heavy metals emitted by large combustion plants;

(c) the cost-effectiveness and costs and advantages of further emission reductions in the combustion plants sector in Member States compared to other sectors;

(d) the technical and economic feasibility of such emission reductions;

(e) the effects of both the standards set for the large combustion plants sector including the provisions for indigenous solid fuels, and the competition situation in the energy market, on the environment and the internal market;

(f) any national emission reduction plans provided by Member States in accordance with paragraph 6.

The Commission shall include in its report an appropriate proposal of possible end dates or of lower limit values for the derogation contained in footnote 2 to Annex VI A.

8. The report referred to in paragraph 7 shall, as appropriate, be accompanied by related proposals, having regard to Directive 96/61/EC.

Article 5

By way of derogation from Annex III:

(1) Plants, of a rated thermal input equal to or greater than 400 MW, which do not operate more than the following numbers of hours a year (rolling average over a period of five years),

— until 31 December 2015, 2 000 hours;

— from 1 January 2016, 1 500 hours;

shall be subject to a limit value for sulphur dioxide emissions of 800 mg/Nm^3.

This provision shall not apply to new plants for which the licence is granted pursuant to Article 4(2).

(2) Until 31 December 1999, the Kingdom of Spain may authorise new power plants with a rated thermal input equal to or greater than 500 MW burning indigenous or imported solid fuels, commissioned before the end of 2005 and complying with the following requirements:

(a) in the case of imported solid fuels, a sulphur dioxide emission limit value of 800 mg/Nm^3;

(b) in the case of indigenous solid fuels, at least a 60 % rate of desulphurisation,

provided that the total authorised capacity of such plants to which this derogation applies does not exceed:

— 2 000 MWe in the case of plants burning indigenous solid fuels;

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— in the case of plants burning imported solid fuels either 7 500 or 50 % of all the new capacity of all plants burning solid fuels authorised up to 31 December 1999, whichever is the lower.

Article 6

In the case of new plants for which the licence is granted pursuant to Article 4(2) or plants covered by Article 10, Member States shall ensure that the technical and economic feasibility of providing for the combined generation of heat and power is examined. Where this feasibility is confirmed, bearing in mind the market and the distribution situation, installations shall be developed accordingly.

Article 7

1. Member States shall ensure that provision is made in the licences or permits referred to in Article 4 for procedures relating to malfunction or breakdown of the abatement equipment. In case of a breakdown the competent authority shall in particular require the operator to reduce or close down operations if a return to normal operation is not achieved within 24 hours, or to operate the plant using low polluting fuels. In any case the competent authority shall be notified within 48 hours. In no circumstances shall the cumulative duration of unabated operation in any twelve-month period exceed 120 hours. The competent authority may allow exceptions to the limits of 24 hours and 120 hours above in cases where, in their judgement:

(a) there is an overriding need to maintain energy supplies, or

(b) the plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.

2. The competent authority may allow a suspension for a maximum of six months from the obligation to comply with the emission limit values provided for in Article 4 for sulphur dioxide in respect of a plant which to this end normally uses low-sulphur fuel, in cases where the operator is unable to comply with these limit values because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage. The Commission shall immediately be informed of such cases.

3. The competent authority may allow a derogation from the obligation to comply with the emission limit values provided for in Article 4 in cases where a plant which normally uses only gaseous fuel, and which would otherwise need to be equipped with a waste gas purification facility, has to resort exceptionally, and for a period not exceeding 10 days except where there is an overriding need to maintain energy supplies, to the use of other fuels because of a sudden interruption in the supply of gas. The competent authority shall immediately be informed of each specific case as it arises. Member States shall inform the Commission immediately of the cases referred to in this paragraph.

Article 8

1. In the case of plants with a multi-firing unit involving the simultaneous use of two or more fuels, when granting the licence referred to in Articles 4(1) or 4(2), and in the case of such plants covered by Articles 4(3) or 10, the competent authority shall set the emission limit values as follows:

(a) firstly by taking the emission limit value relevant for each individual fuel and pollutant corresponding to the rated thermal input of the combustion plant as given in Annexes III to VII,

(b) secondly by determining fuel-weighted emission limit values, which are obtained by multiplying the above individual emission limit value by the thermal input delivered by each fuel, the product of multiplication being divided by the sum of the thermal inputs delivered by all fuels,

(c) thirdly by aggregating the fuel-weighted limit values.

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2. In multi-firing units using the distillation and conversion residues from crude-oil refining for own consumption, alone or with other fuels, the provisions for the fuel with the highest emission limit value (determinative fuel) shall apply, notwithstanding paragraph 1 above, if during the operation of the combustion plant the proportion contributed by that fuel to the sum of the thermal inputs delivered by all fuels is at least 50 %.

Where the proportion of the determinative fuel is lower than 50 %, the emission limit value is determined on a pro rata basis of the heat input supplied by the individual fuels in relation to the sum of the thermal inputs delivered by all fuels as follows:

(a) firstly by taking the emission limit value relevant for each individual fuel and pollutant corresponding to the rated heat input of the combustion plant as given in Annexes III to VII,

(b) secondly by calculating the emission limit value of the determinative fuel (fuel with the highest emission limit value according to Annexes III to VII and, in the case of two fuels having the same emission limit value, the fuel with the higher thermal input); this value is obtained by multiplying the emission limit value laid down in Annexes III to VII for that fuel by a factor of two, and subtracting from this product the emission limit value of the fuel with the lowest emission limit value,

(c) thirdly by determining the fuel-weighted emission limit values, which are obtained by multiplying the calculated fuel emission limit value by the thermal input of the determinative fuel and the other individual emission limit values by the thermal input delivered by each fuel, the product of multiplication being divided by the sum of the thermal inputs delivered by all fuels,

(d) fourthly by aggregating the fuel-weighted emission limit values.

3. As an alternative to paragraph 2, the following average emission limit values for sulphur dioxide may be applied (irrespective of the fuel combination used):

(a) for plants referred to in Article 4(1) and (3): 1 000 mg/Nm^3, averaged over all such plants within the refinery;

(b) for new plants referred to in Article 4(2): 600 mg/Nm^3 , averaged over all such plants within the refinery, with the exception of gas turbines.

The competent authorities shall ensure that the application of this provision does not lead to an increase in emissions from existing plants.

4. In the case of plants with a multi-firing unit involving the alternative use of two or more fuels, when granting the licence referred to in Article 4(1) and (2), and in the case of such plants covered by Articles 4(3) or 10, the emission limit values set out in Annexes III to VII corresponding to each fuel used shall be applied.

Article 9

Waste gases from combustion plants shall be discharged in controlled fashion by means of a stack. The licence referred to in Article 4 and licences for combustion plants covered by Article 10 shall lay down the discharge conditions. The competent authority shall in particular ensure that the stack height is calculated in such a way as to safeguard health and the environment.

Article 10

Where a combustion plant is extended by at least 50 MW, the emission limit values as set in part B of Annexes III to VII shall apply to the new part of the plant and shall be fixed in relation to the thermal capacity of the entire plant. This provision shall not apply in the cases referred to in Article 8(2) and (3).

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Where the operator of a combustion plant is envisaging a change according to Articles 2(10)(b) and 12(2) of Directive 96/61/EC, the emission limit values as set out in part B of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust shall apply.

Article 11

In the case of construction of combustion plants which are likely to have significant effects on the environment in another Member State, the Member States shall ensure that all appropriate information and consultation takes place, in accordance with Article 7 of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment ([1]).

Article 12

Member States shall take the necessary measures to ensure the monitoring, in accordance with Annex VIII(A), of emissions from the combustion plants covered by this Directive and of all other values required for the implementation of this Directive. Member States may require that such monitoring shall be carried out at the operator's expense.

Article 13

Member States shall take appropriate measures to ensure that the operator informs the competent authorities within reasonable time limits about the results of the continuous measurements, the checking of the measuring equipment, the individual measurements and all other measurements carried out in order to assess compliance with this Directive.

Article 14

1. In the event of continuous measurements, the emission limit values set out in part A of Annexes III to VII shall be regarded as having been complied with if the evaluation of the results indicates, for operating hours within a calendar year, that:

(a) none of the calendar monthly mean values exceeds the emission limit values; and

(b) in the case of:

(i) sulphur dioxide and dust: 97 % of all the 48 hourly mean values do not exceed 110 % of the emission limit values,

(ii) nitrogen oxides: 95 % of all the 48 hourly mean values do not exceed 110 % of the emission limit values.

The periods referred to in Article 7 as well as start-up and shut-down periods shall be disregarded.

2. In cases where only discontinuous measurements or other appropriate procedures for determination are required, the emission limit values set out in Annexes III to VII shall be regarded as having been complied with if the results of each of the series of measurements or of the other procedures defined and determined according to the rules laid down by the competent authorities do not exceed the emission limit values.

►C1 3. In the cases referred to in Article 5(2), the rates ◄ of desulphurisation shall be regarded as having been complied with if the evaluation of measurements carried out pursuant to Annex VIII, point A.3, indicates that all of the calendar monthly mean values or all of the rolling monthly mean values achieve the required desulphurisation rates.

([1]) OJ L 175, 5.7.1985, p. 40. Directive as last amended by Council Directive 97/11/EC (OJ L 73, 14.3.1997, p. 5).

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The periods referred to in Article 7 as well as start-up and shut-down periods shall be disregarded.

4. For new plants for which the licence is granted pursuant to Article 4(2), the emission limit values shall be regarded, for operating hours within a calendar year, as complied with if:

(a) no validated daily average value exceeds the relevant figures set out in part B of Annexes III to VII, and

(b) 95 % of all the validated hourly average values over the year do not exceed 200 % of the relevant figures set out in part B of Annexes III to VII.

The 'validated average values' are determined as set out in point A.6 of Annex VIII.

The periods referred to in Article 7 as well as start up and shut down periods shall be disregarded.

Article 15

1. Member States shall, not later than 31 December 1990, inform the Commission of the programmes drawn up in accordance with Article 3(1).

At the latest one year after the end of the different phases for reduction of emissions from existing plants, the Member States shall forward to the Commission a summary report on the results of the implementation of the programmes.

An intermediate report is required as well in the middle of each phase.

2. The reports referred to in paragraph 1 shall provide an overall view of:

(a) all the combustion plants covered by this Directive,

(b) emissions of sulphur dioxide, and oxides of nitrogen expressed in tonnes per annum and as concentrations of these substances in the waste gases,

(c) measures already taken or envisaged with a view to reducing emissions, and of changes in the choice of fuel used,

(d) changes in the method of operation already made or envisaged,

(e) definitive closures of combustion plants already effected or envisaged, and

(f) where appropriate, the emission limit values imposed in the programmes in respect of existing plants.

When determining the annual emissions and concentrations of pollutants in the waste gases, Member States shall take account of Articles 12, 13 and 14.

3. Member States applying Article 5 or the provisions of the Nota Bene in Annex III or the footnotes in Annex VI.A shall report thereon annually to the Commission.

Article 16

The Member States shall determine the penalties applicable to breaches of the national provisions adopted pursuant to this Directive. The penalties thus provided for shall be effective, proportionate and dissuasive.

Article 17

1. Directive 88/609/EEC shall be repealed with effect from 27 November 2002, without prejudice to paragraph 2 or to the obligations of Member States concerning the time limits for transposition and application of that Directive listed in Annex IX hereto.

2. In the case of new plants licensed ►C1 before 27 November 2002 as specified in Article 4(1) ◄ of this Directive, Article 4(1),

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Article 5(2), Article 6, Article 15(3), Annexes III, VI, VIII and point A.2 of Annex IX to Directive 88/609/EEC as amended by Directive 94/66/EC shall remain in effect until 1 January 2008 after which they shall be repealed.

3. References to Directive 88/609/EEC shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex X hereto.

Article 18

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 27 November 2002. They shall forthwith inform the Commission thereof.

When Member States adopt these provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. For existing plant, and for new plant for which a licence is granted pursuant to Article 4(1), the provisions of point A.2 of Annex VIII shall be applied from 27 November 2004.

3. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field covered by this Directive.

Article 19

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

Article 20

This Directive is addressed to the Member States.

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ANNEX I

CEILINGS AND REDUCTION TARGETS FOR EMISSIONS OF SO_2 FROM EXISTING PLANTS (1) (2)

Member State	0	1	2	3	4	5	6	7	8	9
	SO_2 emissions by large combustion plants 1980 ktonnes	Emission ceiling (ktonnes/year)			% reduction over 1980 emissions			% reduction over adjusted 1980 emissions		
		Phase 1	Phase 2	Phase 3	Phase 1	Phase 2	Phase 3	Phase 1	Phase 2	Phase 3
		1993	1998	2003	1993	1998	2003	1993	1998	2003
Belgium	530	318	212	159	− 40	− 60	− 70	− 40	− 60	− 70
Denmark	323	213	141	106	− 34	− 56	− 67	− 40	− 60	− 70
Germany	2 225	1 335	890	668	− 40	− 60	− 70	− 40	− 60	− 70
Greece	303	320	320	320	+ 6	+ 6	+ 6	− 45	− 45	− 45
Spain	2 290	2 290	1 730	1 440	0	− 24	− 37	− 21	− 40	− 50
France	1 910	1 146	764	573	− 40	− 60	− 70	− 40	− 60	− 70
Ireland	99	124	124	124	+ 25	+ 25	+ 25	− 29	− 29	− 29
Italy	2 450	1 800	1 500	900	− 27	− 39	− 63	− 40	− 50	− 70
Luxembourg	3	1,8	1,5	1,5	− 40	− 50	− 60	− 40	− 50	− 50
Netherlands	299	180	120	90	− 40	− 60	− 70	− 40	− 60	− 70
Portugal	115	232	270	206	+ 102	+ 135	+ 79	− 25	− 13	− 34
United Kingdom	3 883	3 106	2 330	1 553	− 20	− 40	− 60	− 20	− 40	− 60
Austria	90	54	36	27	− 40	− 60	− 70	− 40	− 60	− 70
Finland	171	102	68	51	− 40	− 60	− 70	− 40	− 60	− 70
Sweden	112	67	45	34	− 40	− 60	− 70	− 40	− 60	− 70

(1) Additional emissions may arise from capacity authorised on or after 1 July 1987.

(2) Emissions coming from combustion plants authorised before 1 July 1987 but not yet in operation before that date and which have not been taken into account in establishing the emission ceilings fixed by this Annex shall either comply with the requirements established by this Directive for new plants or be accounted for in the overall emissions from existing plants that must not exceed the ceilings fixed in this Annex.

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ANNEX II

CEILINGS AND REDUCTION TARGETS FOR EMISSIONS OF NO_x FROM EXISTING PLANTS (1) (2)

Member State	0	1	2	3	4	5	6
	NO_x emissions (as NO_2) by large combustion plants 1980 ktonnes	NO_x emission ceilings (ktonnes/year)		% reduction over 1980 emissions		% reduction over adjusted 1980 emissions	
		Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2
		1993 (1)	1998	1993 (1)	1998	1993 (1)	1998
Belgium	110	88	66	− 20	− 40	− 20	− 40
Denmark	124	121	81	− 3	− 35	− 10	− 40
Germany	870	696	522	− 20	− 40	− 20	− 40
Greece	36	70	70	+ 94	+ 94	0	0
Spain	366	368	277	+ 1	− 24	− 20	− 40
France	400	320	240	− 20	− 40	− 20	− 40
Ireland	28	50	50	+ 79	+ 79	0	0
Italy	580	570	428	− 2	− 26	− 20	− 40
Luxembourg	3	2,4	1,8	− 20	− 40	− 20	− 40
Netherlands	122	98	73	− 20	− 40	− 20	− 40
Portugal	23	59	64	+ 157	+ 178	− 8	0
United Kingdom	1 016	864	711	− 15	− 30	− 15	− 30
Austria	19	15	11	− 20	− 40	− 20	− 40
Finland	81	65	48	− 20	− 40	− 20	− 40
Sweden	31	25	19	− 20	− 40	− 20	− 40

(1) Member States may for technical reasons delay for up to two years the phase 1 date for reduction in NO_x emissions by notifying the Commission within one month of the notification of this Directive.

(1) Additional emissions may arise from capacity authorised on or after 1 July 1987.

(2) Emissions coming from combustion plants authorised before 1 July 1987 but not yet in operation before that date and which have not been taken into account in establishing the emission ceilings fixed by this Annex shall either comply with the requirements established by this Directive for new plants or be accounted for in the overall emissions from existing plants that must not exceed the ceilings fixed in this Annex.

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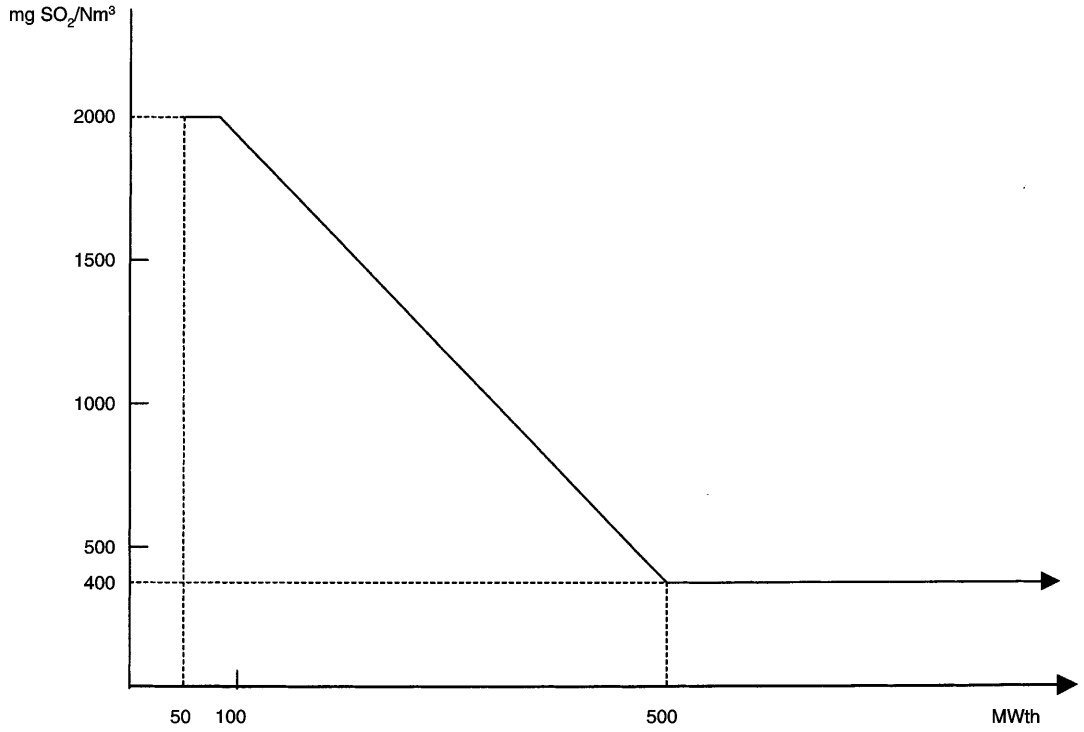
ANNEX III

EMISSION LIMIT VALUES FOR SO_2

Solid fuel

A. SO_2 emission limit values expressed in mg/Nm³ (O_2 content 6 %) to be applied by new and existing plants pursuant to Article 4(1) and 4(3) respectively:



NB. Where the emission limit values above cannot be met due to the characteristics of the fuel, a rate of desulphurisation of at least 60 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 100 MWth, 75 % for plants greater than 100 MWth and less than or equal to 300 MWth and 90 % for plants greater than 300 MWth. For plants greater than 500 MWth, a desulphurisation rate of at least 94 % shall apply or of at least 92 % where a contract for the fitting of flue gas desulphurisation or lime injection equipment has been entered into, and work on its installation has commenced, before 1 January 2001.

B. SO_2 emission limit values expressed in mg/Nm³ (O_2 content 6 %) to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines.

Type of fuel	50 to 100 MWth	100 to 300 MWth	> 300 MWth
Biomass	200	200	200
General case	850	200 (1)	200

(1) Except in the case of the 'Outermost Regions' where 850 to 200 mg/Nm³ (linear decrease) shall apply.

NB. Where the emission limit values above cannot be met due to the characteristics of the fuel, installations shall achieve 300 mg/Nm³ SO_2, or a rate of desulphurisation of at least 92 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 300 MWth and in the case of plants with a rated thermal input greater than 300 MWth

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a rate of desulphurisation of at least 95 % together with a maximum permissible emission limit value of 400 mg/Nm^3 shall apply.

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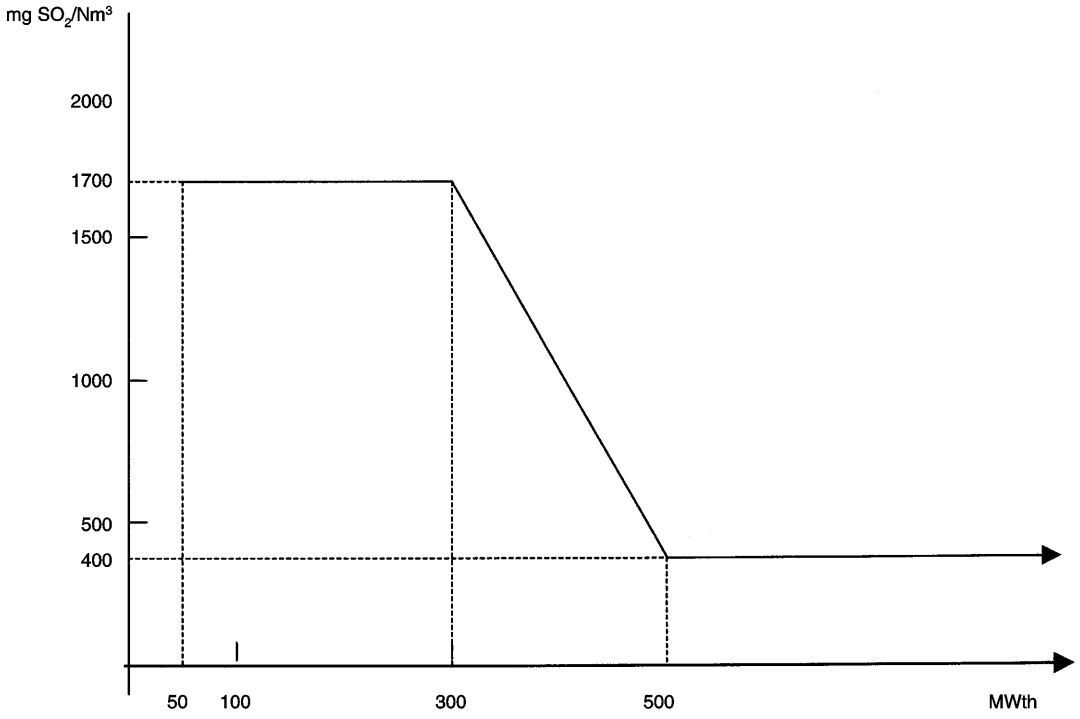
ANNEX IV

EMISSION LIMIT VALUES FOR SO_2

Liquid fuels

A. SO_2 emission limit values expressed in mg/Nm³ (O_2 content 3 %) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:



B. SO_2 emission limit values expressed in mg/Nm³ (O_2 content 3 %) to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines

50 to 100 MWth	100 to 300 MWth	> 300 MWth
850	400 to 200 (linear decrease) (1)	200

(1) Except in the case of the 'Outermost Regions' where 850 to 200 mg/Nm³ (linear decrease) shall apply.

In the case of two installations with a rated thermal input of 250 MWth on Crete and Rhodos to be licensed before 31 December 2007 the emission limit value of 1 700 mg/Nm³ shall apply.

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ANNEX V

EMISSION LIMIT VALUES FOR SO_2

Gaseous fuels

A. SO_2 emission limit values expressed in mg/Nm³ (O_2 content 3 %) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:

Type of fuel	Limit values (mg/Nm³)
Gaseous fuels in general	35
Liquefied gas	5
Low calorific gases from gasification of refinery residues, coke oven gas, blast-furnace gas	800
Gas from gasification of coal	(1)

(1) The Council will fix the emission limit values applicable to such gas at a later stage on the basis of proposals from the Commission to be made in the light of further technical experience.

B. SO_2 emission limit values expressed in mg/Nm³ (O_2 content 3 %) to be applied by new plants pursuant to Article 4(2):

Gaseous fuels in general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low caloric gases from blast furnace	200

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ANNEX VI

EMISSION LIMIT VALUES FOR NO_x (MEASURED AS NO_2)

A. NO_x emission limit values expressed in mg/Nm³ (O_2 content 6 % for solid fuels, 3 % for liquid and gaseous fuels) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:

Type of fuel:	Limit values (1) (mg/Nm³)
Solid (2), (3):	
50 to 500 MWth:	600
>500 MWth:	500
From 1 January 2016	
50 to 500 MWth:	600
>500 MWth:	200
Liquid:	
50 to 500 MWth:	450
>500 MWth:	400
Gaseous:	
50 to 500 MWth:	300
>500 MWth:	200

(1) Except in the case of the 'Outermost Regions' where the following values shall apply:

Solid in general: 650

Solid with < 10 % vol comps: 1 300

Liquid: 450

Gaseous: 350

(2) Until 31 December 2015 plants of a rated thermal input greater than 500 MW, which from 2008 onwards do not operate more than 2 000 hours a year (rolling average over a period of five years), shall:

— in the case of plant licensed in accordance with Article 4(3)(a), be subject to a limit value for nitrogen oxide emissions (measured as NO_2) of 600 mg/Nm³;

— In the case of plant subject to a national plan under Article 4(6), have their contribution to the national plan assessed on the basis of a limit value of 600 mg/Nm_3.

From 1 January 2016 such plants, which do not operate more than 1 500 hours a year (rolling average over a period of five years), shall be subject to a limit value for nitrogen oxide emissions (measured as NO_2) of 450 mg/Nm³.

(3) Until 1 January 2018 in the case of plants that in the 12 month period ending on 1 January 2001 operated on, and continue to operate on, solid fuels whose volatile content is less than 10 %, 1 200 mg/Nm³ shall apply.

B. NO_x emission limit values expressed in mg/Nm³ to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines

Solid fuels (O_2 content 6 %)

Type of fuel	50 to 100 MWth	100 to 300 MWth	> 300 MWth
Biomass	400	300	200
General case	400	200 (1)	200

(1) Except in the case of the 'Outermost Regions' where 300 mg/Nm³ shall apply.

Liquid fuels (O_2 content 3 %)

50 to 100 MWth	100 to 300 MWth	> 300 MWth
400	200 (1)	200

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(1) Except in the case of the 'Outermost Regions' where 300 mg/Nm^3 shall apply.

In the case of two installations with a rated thermal input of 250 MWth on Crete and Rhodos to be licensed before 31 December 2007 the emission limit value of 400 mg/Nm^3 shall apply.

Gaseous fuels (O_2 content 3 %)

	50 to 300 MWth	> 300 MWth
Natural gas (note 1)	150	100
Other gases	200	200

Gas Turbines

NO_x emission limit values expressed in mg/Nm^3 (O_2 content 15 %) to be applied by a single gas turbine unit pursuant to Article 4(2) (the limit values apply only above 70 % load):

	> 50 MWth (thermal input at ISO conditions)
Natural gas (Note 1)	50 (Note 2)
Liquid fuels (Note 3)	120
Gaseous fuels (other than natural gas)	120

Gas turbines for emergency use that operate less than 500 hours per year are excluded from these limit values. The operator of such plants is required to submit each year to the competent authority a record of such used time.

Note 1: Natural gas is naturally occurring methane with not more than 20 % (by volume) of inerts and other constituents.

Note 2: 75 mg/Nm^3 in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:

— gas turbines, used in combined heat and power systems having an overall efficiency greater than 75 %;

— gas turbines used in combined cycle plants having an annual average overall electrical efficiency greater than 55 %;

— gas turbines for mechanical drives.

For single cycle gas turbines not falling into any of the above categories, but having an efficiency greater than 35 % − determined at ISO base load conditions − the emission limit value shall be $50*\eta/35$ where η is the gas turbine efficiency expressed as a percentage (and at ISO base load conditions).

Note 3: This emission limit value only applies to gas turbines firing light and middle distillates.

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ANNEX VII

EMISSION LIMIT VALUES FOR DUST

A. Dust emission limit values expressed in mg/Nm³ (O_2 content 6 % for solid fuels, 3 % for liquid and gaseous fuels) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:

Type of fuel	Rated thermal input (MW)	Emission limit values (mg/Nm³)
Solid	≥ 500 < 500	50 (2) 100
Liquid (1)	all plants	50
Gaseous	all plants	5 as a rule 10 for blast furnace gas 50 for gases produced by the steel industry which can be used elsewhere

(1) A limit value of 100 mg/Nm³ may be applied to plants with a rated thermal input of less than 500 MWth burning liquid fuel with an ash content of more than 0,06 %.

(2) A limit value of 100 mg/Nm³ may be applied to plants licensed pursuant to Article 4(3) with a rated thermal input greater than or equal to 500 MWth burning solid fuel with a heat content of less than 5 800 kJ/kg (net calorific value), a moisture content greater than 45 % by weight, a combined moisture and ash content greater than 60 % by weight and a calcium oxide content greater than 10 %.

B. Dust emission limit values expressed in mg/Nm³ to be applied by new plants, pursuant to Article 4(2) with the exception of gas turbines:

Solid fuels (O_2 content 6 %)

50 to 100 MWth	> 100 MWth
50	30

Liquid fuels (O_2 content 3 %)

50 to 100 MWth	> 100 MWth
50	30

In the case of two installations with a rated thermal input of 250 MWth on Crete and Rhodos to be licensed before 31 December 2007 the emission limit value of 50 mg/Nm³ shall apply.

Gaseous fuels (O_2 content 3 %)

As a rule	5
For blast furnace gas	10
For gases produced by the steel industry which can be used elsewhere	30

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ANNEX VIII

METHODS OF MEASUREMENT OF EMISSIONS

A. **Procedures for measuring and evaluating emissions from combustion plants.**

1. *Until 27 November 2004*

   Concentrations of SO_2, dust, NO_x shall be measured continuously in the case of new plants for which a licence is granted pursuant to Article 4(1) with a rated thermal input of more than 300 MW. However, monitoring of SO_2 and dust may be confined to discontinuous measurements or other appropriate determination procedures in cases where such measurements or procedures, which must be verified and approved by the competent authorities, may be used to obtain concentration.

   In the case of new plants for which a licence is granted pursuant to Article 4(1) not covered by the first subparagraph, the competent authorities may require continuous measurements of those three pollutants to be carried out where considered necessary. Where continuous measurements are not required, discontinuous measurements or appropriate determination procedures as approved by the competent authorities shall be used regularly to evaluate the quantity of the above-mentioned substances present in the emissions.

2. *From 27 November 2002 and without prejudice to Article 18(2)*

   Competent authorities shall require continuous measurements of concentrations of SO_2, NO_x, and dust from waste gases from each combustion plant with a rated thermal input of 100 MW or more.

   By way of derogation from the first subparagraph, continuous measurements may not be required in the following cases:

   — for combustion plants with a life span of less than 10 000 operational hours;
   — for SO_2 and dust from natural gas burning boilers or from gas turbines firing natural gas;
   — for SO_2 from gas turbines or boilers firing oil with known sulphur content in cases where there is no desulphurisation equipment;
   — for SO_2 from biomass firing boilers if the operator can prove that the SO_2 emissions can under no circumstances be higher than the prescribed emission limit values.

   Where continuous measurements are not required, discontinuous measurements shall be required at least every six months. As an alternative, appropriate determination procedures, which must be verified and approved by the competent authorities, may be used to evaluate the quantity of the above mentioned pollutants present in the emissions. Such procedures shall use relevant CEN standards as soon as they are available. If CEN standards are not available ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.

3. In the case of plants which must comply with the desulphurisation rates fixed by Article 5(2) and and Annex III, the requirements concerning SO_2 emission measurements established under paragraph 2 of this point shall apply. Moreover, the sulphur content of the fuel which is introduced into the combustion plant facilities must be regularly monitored.

4. The competent authorities shall be informed of substantial changes in the type of fuel used or in the mode of operation of the plant. They shall decide whether the monitoring requirements laid down in paragraph 2 are still adequate or require adaptation.

5. The continuous measurements carried out in compliance with paragraph 2 shall include the relevant process operation parameters of oxygen content, temperature, pressure and water vapour content. The continuous measurement of the water vapour content of the exhaust gases shall not be necessary, provided that the sampled exhaust gas is dried before the emissions are analysed.

   Representative measurements, i.e. sampling and analysis, of relevant pollutants and process parameters as well as reference measurement methods to calibrate automated measurement systems shall be carried out in accordance with CEN standards as soon as they are available. If CEN standards are not available ISO standards, national or international

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standards which will ensure the provision of data of an equivalent scientific quality shall apply.

Continuous measuring systems shall be subject to control by means of parallel measurements with the reference methods at least every year.

6. The values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Sulphur dioxide	20 %
Nitrogen oxides	20 %
Dust	30 %

The validated hourly and daily average values shall be determined from the measured valid hourly average values after having subtracted the value of the confidence interval specified above.

Any day in which more than three hourly average values are invalid due to malfunction or maintenance of the continuous measurement system shall be invalidated. If more than ten days over a year are invalidated for such situations the competent authority shall require the operator to take adequate measures to improve the reliability of the continuous monitoring system.

B. **Determination of total annual emissions of combustion plants**

Until and including 2003 the competent authorities shall obtain determination of the total annual emissions of SO_2 and NO_x from new combustion plants. When continuous monitoring is used, the operator of the combustion plant shall add up separately for each pollutant the mass of pollutant emitted each day, on the basis of the volumetric flow rates of waste gases. Where continuous monitoring is not in use, estimates of the total annual emissions shall be determined by the operator on the basis of paragraph A.1 to the satisfaction of the competent authorities.

Member States shall communicate to the Commission the total annual SO_2 and NO_x emissions of new combustion plants at the same time as the communication required under paragraph C.3 concerning the total annual emissions of existing plants.

Member States shall establish, starting in 2004 and for each subsequent year, an inventory of SO_2, NO_x and dust emissions from all combustion plants with a rated thermal input of 50 MW or more. The competent authority shall obtain for each plant operated under the control of one operator at a given location the following data:

— the total annual emissions of SO_2, NO_x and dust (as total suspended particles).

— the total annual amount of energy input, related to the net calorific value, broken down in terms of the five categories of fuel: biomass, other solid fuels, liquid fuels, natural gas, other gases.

A summary of the results of this inventory that shows the emissions from refineries separately shall be communicated to the Commission every three years within twelve months from the end of the three-year period considered . The yearly plant-by-plant data shall be made available to the Commission upon request. The Commission shall make available to the Member States a summary of the comparison and evaluation of the national inventories within twelve months of receipt of the national inventories.

Commencing on 1 January 2008 Member States shall report annually to the Commission on those existing plants declared for eligibility under Article 4(4) along with the record of the used and unused time allowed for the plants' remaining operational life.

C. **Determination of the total annual emissions of existing plants until and including 2003.**

1. Member States shall establish, starting in 1990 and for each subsequent year until and including 2003, a complete emission inventory for existing plants covering SO_2 and NO_x:

   — on a plant by plant basis for plants above 300 MWth and for refineries;

   — on an overall basis for other combustion plants to which this Directive applies.

2. The methodology used for these inventories shall be consistent with that used to determine SO_2 and NO_x emissions from combustion plants in 1980.

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3. The results of this inventory shall be communicated to the Commission in a conveniently aggregated form within nine months from the end of the year considered. The methodology used for establishing such emission inventories and the detailed base information shall be made available to the Commission at its request.

4. The Commission shall organise a systematic comparison of such national inventories and, if appropriate, shall submit proposals to the Council aiming at harmonising emission inventory methodologies, for the needs of an effective implementation of this Directive.

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ANNEX IX

TIME-LIMITS FOR TRANSPOSITION AND IMPLEMENTATION OF THE REPEALED DIRECTIVE

(referred to in Article 17(1))

Directive	Time-limits for transposition	Time-limits for application
88/609/EEC (OJ L 336, 7.12.1988, p. 1)	30 June 1990	1 July 1990 31 December 1990 31 December 1993 31 December 1998 31 December 2003
94/66/EC (OJ L 337, 24.12.1994, p. 83)	24 June 1995	

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ANNEX X

CORRELATION TABLE

(Referred to in Article 17(3))

This Directive	Directive 88/609/EEC
Article 1	Article 1
Article 2	Article 2
Article 3	Article 3
Article 4(1)	Article 4(1)
Article 4(2), (3) and (4)	
Article 4(5)	Article 4(3)
Article 4(6), (7) and (8)	
Article 5	Article 5
	Article 6
Article 6	
Article 7	Article 8
Article 8	Article 9
Article 9	Article 10
Article 10	Article 11
Article 11	Article 12
Article 12	Article 13(1)
Article 13	Article 14
Article 14	Article 15
Article 15(1), (2) and (3)	Article 16(1), (2) and (4)
Article 16	
Article 17	
Article 18(1), first subparagraph, and (3)	Article 17(1) and (2)
Article 18(1), second subparagraph, and (2) and Article 19	
Article 20	Article 18
Annexes I to VIII	Annexes I to IX
Annex IX and X	—

►B DIRECTIVE 2000/76/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 December 2000 on the incineration of waste

(OJ L 332, 28.12.2000, p. 91)

Amended by:

		Official Journal		
		No	page	date
►M1	Regulation (EC) No 1137/2008 of the European Parliament and of the Council of 22 October 2008	L 311	1	21.11.2008

Corrected by:

►C1 Corrigendum, OJ L 145, 31.5.2001, p. 52 (2000/76/EC)

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DIRECTIVE 2000/76/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 4 December 2000

on the incineration of waste

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission ([1]),

Having regard to the Opinion of the Economic and Social Committee ([2]),

Having regard to the Opinion of the Committee of the Regions ([3]),

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([4]), and in the light of the joint text approved by the Conciliation Committee on 11 October 2000,

Whereas:

(1) The fifth Environment Action Programme: Towards sustainability — A European Community programme of policy and action in relation to the environment and sustainable development, supplemented by Decision No 2179/98/EC on its review ([5]), sets as an objective that critical loads and levels of certain pollutants such as nitrogen oxides (NO_x), sulphur dioxide (SO_2), heavy metals and dioxins should not be exceeded, while in terms of air quality the objective is that all people should be effectively protected against recognised health risks from air pollution. That Programme further sets as an objective a 90 % reduction of dioxin emissions of identified sources by 2005 (1985 level) and at least 70 % reduction from all pathways of cadmium (Cd), mercury (Hg) and lead (Pb) emissions in 1995.

(2) The Protocol on persistent organic pollutants signed by the Community within the framework of the United Nations Economic Commission for Europe (UN-ECE) Convention on long-range transboundary air pollution sets legally binding limit values for the emission of dioxins and furans of 0,1 ng/m; TE (Toxicity Equivalents) for installations burning more than 3 tonnes per hour of municipal solid waste, 0,5 ng/m; TE for installations burning more than 1 tonne per hour of medical waste, and 0,2 ng/m; TE for installations burning more than 1 tonne per hour of hazardous waste.

(3) The Protocol on Heavy Metals signed by the Community within the framework of the UN-ECE Convention on long-range trans-

([1]) OJ C 13, 17.1.1998, p. 6 and
OJ C 372, 2.12.1998, p. 11.
([2]) OJ C 116, 28.4.1999, p. 40.
([3]) OJ C 198, 14.7.1999, p. 37.
([4]) Opinion of the European Parliament of 14 April 1999 (OJ C 219, 30.7.1999, p. 249), Council Common Position of 25 November 1999 (OJ C 25, 28.1.2000, p. 17) and Decision of the European Parliament of 15 March 2000 (not yet published in the Official Journal). Decision of the European Parliament of 16 November 2000 and Decision of the Council of 20 November 2000.
([5]) OJ C 138, 17.5.1993, p. 1 and
OJ L 275, 10.10.1998, p. 1.

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boundary air pollution sets legally binding limit values for the emission of particulate of 10 mg/m^3 for hazardous and medical waste incineration and for the emission of mercury of 0,05 mg/m^3 for hazardous waste incineration and 0,08 mg/m^3 for municipal waste incineration.

(4) The International Agency for Research on Cancer and the World Health Organisation indicate that some polycyclic aromatic hydrocarbons (PAHs) are carcinogenic. Therefore, Member States may set emission limit values for PAHs among other pollutants.

(5) In accordance with the principles of subsidiarity and proportionality as set out in Article 5 of the Treaty, there is a need to take action at the level of the Community. The precautionary principle provides the basis for further measures. This Directive confines itself to minimum requirements for incineration and co-incineration plants.

(6) Further, Article 174 provides that Community policy on the environment is to contribute to protecting human health.

(7) Therefore, a high level of environmental protection and human health protection requires the setting and maintaining of stringent operational conditions, technical requirements and emission limit values for plants incinerating or co-incinerating waste within the Community. The limit values set should prevent or limit as far as practicable negative effects on the environment and the resulting risks to human health.

(8) The Communication from the Commission on the review of the Community Strategy for waste management assigns prevention of waste the first priority, followed by reuse and recovery and finally by safe disposal of waste; in its Resolution of 24 February 1997 on a Community Strategy for waste management ([1]), the Council reiterated its conviction that waste prevention should be the first priority of any rational waste policy in relation to minimising waste production and the hazardous properties of waste.

(9) In its Resolution of 24 February 1997 the Council also underlines the importance of Community criteria concerning the use of waste, the need for appropriate emission standards to apply to incineration facilities, the need for monitoring measures to be envisaged for existing incineration plants, and the need for the Commission to consider amending Community legislation in relation to the incineration of waste with energy recovery in order to avoid large-scale movements of waste for incineration or co-incineration in the Community.

(10) It is necessary to set strict rules for all plants incinerating or co-incinerating waste in order to avoid transboundary movements to plants operating at lower costs due to less stringent environmental standards.

(11) The Communication from the Commission/energy for the future: renewable sources of energy/White paper for a Community strategy and action plan takes into consideration in particular the use of biomass for energy purposes.

(12) Council Directive 96/61/EC ([2]) sets out an integrated approach to pollution prevention and control in which all the aspects of an installations environmental performance are considered in an integrated manner. Installations for the incineration of municipal waste with a capacity exceeding 3 tonnes per hour and installations for the disposal or recovery of hazardous waste with a

([1]) OJ C 76, 11.3.1997, p. 1.
([2]) OJ L 257, 10.10.1996, p. 26.

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capacity exceeding 10 tonnes per day are included within the scope of the said Directive.

(13) Compliance with the emission limit values laid down by this Directive should be regarded as a necessary but not sufficient condition for compliance with the requirements of Directive 96/61/EC. Such compliance may involve more stringent emissions limit values for the pollutants envisaged by this Directive, emission limit values for other substances and other media, and other appropriate conditions.

(14) Industrial experience in the implementation of techniques for the reduction of polluting emissions from incineration plants has been acquired over a period of ten years.

(15) Council Directives 89/369/EEC ([1]) and 89/429/EEC ([2]) on the prevention and reduction of air pollution from municipal waste incineration plants have contributed to the reduction and control of atmospheric emissions from incineration plants. More stringent rules should now be adopted and those Directives should accordingly be repealed.

(16) The distinction between hazardous and non-hazardous waste is based principally on the properties of waste prior to incineration or co-incineration but not on differences in emissions. The same emission limit values should apply to the incineration or co-incineration of hazardous and non-hazardous waste but different techniques and conditions of incineration or co-incineration and different monitoring measures upon reception of waste should be retained.

(17) Member States should take into account Council Directive 1999/30/EC of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air ([3]) when implementing this Directive.

(18) The incineration of hazardous waste with a content of more than 1 % of halogenated organic substances, expressed as chlorine, has to comply with certain operational conditions in order to destroy as many organic pollutants such as dioxins as possible.

(19) The incineration of waste which contains chlorine generates flue gas residues. Such residues should be managed in a way that minimises their amount and harmfulness.

(20) There may be grounds to provide for specified exemptions to the emission limit values for some pollutants during a specified time limit and subject to specific conditions.

(21) Criteria for certain sorted combustible fraction of non-hazardous waste not suitable for recycling, should be developed in order to allow the authorisation of the reduction of the frequency of periodical measurements.

(22) A single text on the incineration of waste will improve legal clarity and enforceability. There should be a single directive for the incineration and co-incineration of hazardous and non-hazardous waste taking fully into account the substance and structure of Council Directive 94/67/EC of 16 December 1994 on the incineration of hazardous waste ([4]). Therefore Directive 94/67/EC should also be repealed.

([1]) OJ L 163, 14.6.1989, p. 32. Directive as last amended by the Accession Act of 1994.
([2]) OJ L 203, 15.7.1989, p. 50. Directive as last amended by the Accession Act of 1994.
([3]) OJ L 163, 29.6.1999, p. 41.
([4]) OJ L 365, 31.12.1994, p. 34.

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(23) Article 4 of Council Directive 75/442/EEC of 15 July 1975 on waste ([1]) requires Member States to take the necessary measures to ensure that waste is recovered or disposed of without endangering human health and without harming the environment. To this end, Articles 9 and 10 of that Directive provide that any plant or undertaking treating waste must obtain a permit from the competent authorities relating, *inter alia*, to the precautions to be taken.

(24) The requirements for recovering the heat generated by the incineration or co-incineration process and for minimising and recycling residues resulting from the operation of incineration or co-incineration plants will assist in meeting the objectives of Article 3 on the waste hierarchy of Directive 75/442/EEC.

(25) Incineration and co-incineration plants treating only animal waste regulated by Directive 90/667/EEC ([2]) are excluded from the scope of this Directive. The Commission intends to propose a revision to the requirements of Directive 90/667 with a view to providing for high environmental standards for the incineration and co-incineration of animal waste.

(26) The permit for an incineration or co-incineration plant shall also comply with any applicable requirements laid down in Directives 91/271/EEC ([3]), 96/61/EC, 96/62/EC ([4]), 76/464/EEC ([5]), and 1999/31/EC ([6]).

(27) The co-incineration of waste in plants not primarily intended to incinerate waste should not be allowed to cause higher emissions of polluting substances in that part of the exhaust gas volume resulting from such co-incineration than those permitted for dedicated incineration plants and should therefore be subject to appropriate limitations.

(28) High-standard measurement techniques are required to monitor emissions to ensure compliance with the emission limit values for the pollutants.

(29) The introduction of emission limit values for the discharge of waste water from the cleaning of exhaust gases from incineration and co-incineration plants will limit a transfer of pollutants from the air into water.

(30) Provisions should be laid down for cases where the emission limit values are exceeded as well as for technically unavoidable stoppages, disturbances or failures of the purification devices or the measurement devices.

(31) In order to ensure transparency of the permitting process throughout the Community the public should have access to information with a view to allowing it to be involved in decisions to be taken following applications for new permits and their subsequent updates. The public should have access to

([1]) OJ L 194, 25.7.1975, p. 39. Directive as last amended by Commission Decision 350/96/EC (OJ L 135, 6.6.1996, p. 32).

([2]) Council Directive 90/667/EEC of 27 November 1990, laying down the veterinary rules for the disposal and processing of animal waste, for its placing on the market and for the prevention of pathogens in feedstuffs of animal or fish origin and amending Directive 90/425/EEC (OJ L 363, 27.12.1990, p. 51). Directive as last amended by the Accession Act of 1994.

([3]) Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40). Directive as amended by Directive 98/15/EC (OJ L 67, 7.3.1998, p. 29).

([4]) Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management (OJ L 296, 21.11.1996, p. 55).

([5]) Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (OJ L 129, 18.5.1976, p. 23). Directive as last amended by the Accession Act of 1994.

([6]) Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1).

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reports on the functioning and monitoring of the plants burning more than three tonnes per hour in order to be informed of their potential effects on the environment and human health.

(32) The Commission should present a report both to the European Parliament and the Council based on the experience of applying this Directive, the new scientific knowledge gained, the development of the state of technology, the progress achieved in emission control techniques, and on the experience made in waste management and operation of the plants and on the development of environmental requirements, with a view to proposing, as appropriate, to adapt the related provisions of this Directive.

(33) The measures necessary for the implementation of this Directive are to be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ([1]).

(34) Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented; those penalties should be effective, proportionate and dissuasive,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Objectives

The aim of this Directive is to prevent or to limit as far as practicable negative effects on the environment, in particular pollution by emissions into air, soil, surface water and groundwater, and the resulting risks to human health, from the incineration and co-incineration of waste.

This aim shall be met by means of stringent operational conditions and technical requirements, through setting emission limit values for waste incineration and co-incineration plants within the Community and also through meeting the requirements of Directive 75/442/EEC.

Article 2

Scope

1. This Directive covers incineration and co-incineration plants.

2. The following plants shall however be excluded from the scope of this Directive:

(a) Plants treating only the following wastes:

(i) vegetable waste from agriculture and forestry,

(ii) vegetable waste from the food processing industry, if the heat generated is recovered,

(iii) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered,

(iv) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood-preservatives or coating, and which includes in particular such wood waste originating from construction and demolition waste,

(v) cork waste,

([1]) OJ L 184, 17.7.1999, p. 23.

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(vi) radioactive waste,

(vii) animal carcasses as regulated by Directive 90/667/EEC without prejudice to its future amendements amendments,

(viii) waste resulting from the exploration for, and the exploitation of, oil and gas resources from off-shore installations and incinerated on board the installation;

(b) Experimental plants used for research, development and testing in order to improve the incineration process and which treat less than 50 tonnes of waste per year.

Article 3

Definitions

For the purposes of this Directive:

1. 'waste' means any solid or liquid waste as defined in Article 1(a) of Directive 75/442/EEC;

2. 'hazardous waste' means any solid or liquid waste as defined in Article 1(4) of Council Directive 91/689/EEC of 12 December 1991 on hazardous waste ([1]).

   For the following hazardous wastes, the specific requirements for hazardous waste in this Directive shall not apply:

   (a) combustible liquid wastes including waste oils as defined in Article 1 of Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils ([2]) provided that they meet the following criteria:

      (i) the mass content of polychlorinated aromatic hydrocarbons, e.g. polychlorinated biphenyls (PCB) or pentachlorinated phenol (PCP) amounts to concentrations not higher than those set out in the relevant Community legislation;

      (ii) these wastes are not rendered hazardous by virtue of containing other constituents listed in Annex II to Directive 91/689/EEC in quantities or in concentrations which are inconsistent with the achievement of the objectives set out in Article 4 of Directive 75/442/EEC; and

      (iii) the net calorific value amounts to at least 30 MJ per kilogramme,

   (b) any combustible liquid wastes which cannot cause, in the flue gas directly resulting from their combustion, emissions other than those from gasoil as defined in Article 1(1) of Directive 93/12/EEC ([3]) or a higher concentration of emissions than those resulting from the combustion of gasoil as so defined;

3. 'mixed municipal waste' means waste from households as well as commercial, industrial and institutional waste, which because of its nature and composition is similar to waste from households, but excluding fractions indicated in the Annex to Decision 94/3/EC ([4])

([1]) OJ L 377, 31.12.1991, p. 20. Directive as amended by Directive 94/31/EC. (OJ L 168, 2.7.1994, p. 28).
([2]) OJ L 194, 25.7.1975, p. 23. Directive as last amended by the Accession Act of 1994.
([3]) Council Directive 93/12/EEC of 23 March 1993 relating to the sulphur content of certain liquid fuels (OJ L 74, 27.3.1993, p. 81). Directive as last amended by Directive 1999/32/EC (OJ L 121,11.5.1999, p. 13).
([4]) Commission Decision 94/3/EC of 20 December 1993 establishing a list of wastes pursuant to Article 1a of Council Directive 75/442/EEC on waste (OJ L 5, 7.1.1994, p. 15).

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under heading 20 01 that are collected separately at source and excluding the other wastes indicated under heading 20 02 of that Annex;

4. ‘incineration plant’ means any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes with or without recovery of the combustion heat generated. This includes the incineration by oxidation of waste as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated.

   This definition covers the site and the entire incineration plant including all incineration lines, waste reception, storage, on site pretreatment facilities, waste-fuel and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack, devices and systems for controlling incineration operations, recording and monitoring incineration conditions;

5. ‘co-incineration plant’ means any stationary or mobile plant whose main purpose is the generation of energy or production of material products and:

   — which uses wastes as a regular or additional fuel; or

   — in which waste is thermally treated for the purpose of disposal.

   If co-incineration takes place in such a way that the main purpose of the plant is not the generation of energy or production of material products but rather the thermal treatment of waste, the plant shall be regarded as an incineration plant within the meaning of point 4.

   This definition covers the site and the entire plant including all co-incineration lines, waste reception, storage, on site pretreatment facilities, waste-, fuel- and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack devices and systems for controlling incineration operations, recording and monitoring incineration conditions;

6. ►C1 ‘existing incineration or co-incineration plant’ means ◄ an incineration or co-incineration plant:

   (a) which is in operation and has a permit in accordance with existing Community legislation before 28 December 2002, or,

   (b) which is authorised or registered for incineration or co-incineration and has a permit issued before 28 December 2002 in accordance with existing Community legislation, provided that the plant is put into operation not later than 28 December 2003, or

   (c) which, in the view of the competent authority, is the subject of a full request for a permit, before 28 December 2002, provided that the plant is put into operation not later than 28 December 2004;

7. ‘nominal capacity’ means the sum of the incineration capacities of the furnaces of which an incineration plant is composed, as specified by the constructor and confirmed by the operator, with due account being taken, in particular, of the calorific value of the waste, expressed as the quantity of waste incinerated per hour;

8. ‘emission’ means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the plant into the air, water or soil;

9. ‘emission limit values’ means the mass, expressed in terms of certain specific parameters, concentration and/or level of an

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emission, which may not be exceeded during one or more periods of time;

10. ‘dioxins and furans’ means all polychlorinated dibenzo-p-dioxins and dibenzofurans listed in Annex I;

11. ‘operator’ means any natural or legal person who operates or controls the plant or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the plant has been delegated;

12. ‘permit’ means a written decision (or several such decisions) delivered by the competent authority granting authorisation to operate a plant, subject to certain conditions which guarantee that the plant complies with all the requirements of this Directive. A permit may cover one or more plants or parts of a plant on the same site operated by the same operator;

13. ‘residue’ means any liquid or solid material (including bottom ash and slag, fly ash and boiler dust, solid reaction products from gas treatment, sewage sludge from the treatment of waste waters, spent catalysts and spent activated carbon) defined as waste in Article 1(a) of Directive 75/442/EEC, which is generated by the incineration or co-incineration process, the exhaust gas or waste water treatment or other processes within the incineration or co-incineration plant.

Article 4

Application and permit

1. Without prejudice to Article 11 of Directive 75/442/EEC or to Article 3 of Directive 91/689/EEC, no incineration or co-incineration plant shall operate without a permit to carry out these activities.

2. Without prejudice to Directive 96/61/EC, the application for a permit for an incineration or co-incineration plant to the competent authority shall include a description of the measures which are envisaged to guarantee that:

(a) the plant is designed, equipped and will be operated in such a manner that the requirements of this Directive are taking into account the categories of waste to be incinerated;

(b) the heat generated during the incineration and co-incineration process is recovered as far as practicable e.g. through combined heat and power, the generating of process steam or district heating;

(c) the residues will be minimised in their amount and harmfulness and recycled where appropriate;

(d) the disposal of the residues which cannot be prevented, reduced or recycled will be carried out in conformity with national and Community legislation.

3. The permit shall be granted only if the application shows that the proposed measurement techniques for emissions into the air comply with Annex III and, as regards water, comply with Annex III paragraphs 1 and 2.

4. The permit granted by the competent authority for an incineration or co-incineration plant shall, in addition to complying with any applicable requirement laid down in Directives 91/271/EEC, 96/61/EC, 96/62/EC, 76/464/EEC and 1999/31/EC:

(a) list explicitly the categories of waste which may be treated. The list shall use at least the categories of waste set up in the European Waste Catalogue (EWC), if possible, and contain information on the quantity of waste, where appropriate;

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(b) include the total waste incinerating or co-incinerating capacity of the plant;

(c) specify the sampling and measurement procedures used to satisfy the obligations imposed for periodic measurements of each air and water pollutants.

5. The permit granted by the competent authority to an incineration or co-incineration plant using hazardous waste shall in addition to paragraph 4:

(a) list the quantities of the different categories of hazardous waste which may be treated;

(b) specify the minimum and maximum mass flows of those hazardous wastes, their lowest and maximum calorific values and their maximum contents of pollutants, e.g. PCB, PCP, chlorine, fluorine, sulphur, heavy metals.

6. Without prejudice to the provisions of the Treaty, Member States may list the categories of waste to be mentioned in the permit which can be co-incinerated in defined categories of co-incineration plants.

7. Without prejudice to Directive 96/61/EC, the competent authority shall periodically reconsider and, where necessary, update permit conditions.

8. Where the operator of an incineration or co-incineration plant for non-hazardous waste is envisaging a change of operation which would involve the incineration or co-incineration of hazardous waste, this shall be regarded as a substantial change within the meaning of Article 2(10)(b) of Directive 96/61/EC and Article 12(2) of that Directive shall apply.

9. If an incineration or co-incineration plant does not comply with the conditions of the permit, in particular with the emission limit values for air and water, the competent authority shall take action to enforce compliance.

Article 5

Delivery and reception of waste

1. The operator of the incineration or co-incineration plant shall take all necessary precautions concerning the delivery and reception of waste in order to prevent or to limit as far as practicable negative effects on the environment, in particular the pollution of air, soil, surface water and groundwater as well as odours and noise, and direct risks to human health. These measures shall meet at least the requirements set out in paragraphs 3 and 4.

2. The operator shall determine the mass of each category of waste, if possible according to the EWC, prior to accepting the waste at the incineration or co-incineration plant.

3. Prior to accepting hazardous waste at the incineration or co-incineration plant, the operator shall have available information about the waste for the purpose of verifying, *inter alia*, compliance with the permit requirements specified in Article 4(5). This information shall cover:

(a) all the administrative information on the generating process contained in the documents mentioned in paragraph 4(a);

(b) the physical, and as far as practicable, chemical composition of the waste and all other information necessary to evaluate its suitability for the intended incineration process;

(c) the hazardous characteristics of the waste, the substances with which it cannot be mixed, and the precautions to be taken in handling the waste.

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4. Prior to accepting hazardous waste at the incineration or co-incineration plant, at least the following reception procedures shall be carried out by the operator:

(a) the checking of those documents required by Directive 91/689/EEC and, where applicable, those required by Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision, and control of shipments of waste within, into and out of the European Community ([1]) and by dangerous-goods transport regulations;

(b) the taking of representative samples, unless inappropriate, e.g. for infectious clinical waste, as far as possible before unloading, to verify conformity with the information provided for in paragraph 3 by carrying out controls and to enable the competent authorities to identify the nature of the wastes treated. These samples shall be kept for at least one month after the incineration.

5. The competent authorities may grant exemptions from paragraphs 2, 3 and 4 for industrial plants and undertakings incinerating or co-incinerating only their own waste at the place of generation of the waste provided that the requirements of this Directive are met.

Article 6

Operating conditions

1. Incineration plants shall be operated in order to achieve a level of incineration such that the slag and bottom ashes Total Organic Carbon (TOC) content is less than 3 % or their loss on ignition is less than 5 % of the dry weight of the material. If necessary appropriate techniques of waste pretreatment shall be used.

Incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the process is raised, after the last injection of combustion air, in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of 850 °C, as measured near the inner wall or at another representative point of the combustion chamber as authorised by the competent authority, for two seconds. If hazardous wastes with a content of more than 1 % of halogenated organic substances, expressed as chlorine, are incinerated, the temperature has to be raised to 1 100 °C for at least two seconds.

Each line of the incineration plant shall be equipped with at least one auxiliary burner. This burner must be switched on automatically when the temperature of the combustion gases after the last injection of combustion air falls below 850 °C or 1 100 °C as the case may be. It shall also be used during plant start-up and shut-down operations in order to ensure that the temperature of 850 °C or 1 100 °C as the case may be is maintained at all times during these operations and as long as unburned waste is in the combustion chamber.

During start-up and shut-down or when the temperature of the combustion gas falls below 850 °C or 1 100 °C as the case may be, the auxiliary burner shall not be fed with fuels which can cause higher emissions than those resulting from the burning of gasoil as defined in Article 1(1) of Council Directive 75/716/EEC, liquefied gas or natural gas.

2. Co-incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of 850 °C for two seconds. If hazardous wastes with a content of more than 1 % of

([1]) OJ L 30, 6.2.1993, p. 1. Regulation as last amended by Commission Regulation (EC) No 2408/98 (OJ L 298, 7.11.1998, p. 19).

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halogenated organic substances, expressed as chlorine, are co-incinerated, the temperature has to be raised to 1 100 °C.

3. Incineration and co-incineration plants shall have and operate an automatic system to prevent waste feed:

(a) at start-up, until the temperature of 850 °C or 1 100 °C as the case may be or the temperature specified according to paragraph 4 has been reached;

(b) whenever the temperature of 850 °C or 1 100 °C as the case may be or the temperature specified according to paragraph 4 is not maintained;

(c) whenever the continuous measurements required by this Directive show that any emission limit value is exceeded due to disturbances or failures of the purification devices.

4. Conditions different from those laid down in paragraph 1 and, as regards the temperature, paragraph 3 and specified in the permit for certain categories of waste or for certain thermal processes may be authorised by the competent authority, provided the requirements of this Directive are met. Member States may lay down rules governing these authorisations. The change of the operational conditions shall not cause more residues or residues with a higher content of organic pollutants compared to those residues which could be expected under the conditions laid down in paragraph 1.

Conditions different from those laid down in paragraph 2 and, as regards the temperature, paragraph 3 and specified in the permit for certain categories of waste or for certain thermal processes may be authorised by the competent authority, provided the requirements of this Directive are met. Member States may lay down rules governing these authorisations. Such authorisation shall be conditional upon at least the provisions for emission limit values set out in Annex V for total organic carbon and CO being complied with.

In the case of co-incineration of their own waste at the place of its production in existing bark boilers within the pulp and paper industry, such authorisation shall be conditional upon at least the provisions for emission limit values set out in Annex V for total organic carbon being complied with.

All operating conditions determined under this paragraph and the results of verifications made shall be communicated by the Member State to the Commission as part of the information provided in accordance with the reporting requirements.

5. Incineration and co-incineration plants shall be designed, equipped, built and operated in such a way as to prevent emissions into the air giving rise to significant ground-level air pollution; in particular, exhaust gases shall be discharged in a controlled fashion and in conformity with relevant Community air quality standards by means of a stack the height of which is calculated in such a way as to safeguard human health and the environment.

6. Any heat generated by the incineration or the co-incineration process shall be recovered as far as practicable.

7. Infectious clinical waste should be placed straight in the furnace, without first being mixed with other categories of waste and without direct handling.

8. The management of the incineration or the co-incineration plant shall be in the hands of a natural person who is competent to manage the plant.

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Article 7

Air emission limit values

1. Incineration plants shall be designed, equipped, built and operated in such a way that the emission limit values set out in Annex V are not exceeded in the exhaust gas.

2. Co-incineration plants shall be designed, equipped, built and operated in such a way that the emission limit values determined according to or set out in Annex II are not exceeded in the exhaust gas.

If in a co-incineration plant more than 40 % of the resulting heat release comes from hazardous waste, the emission limit values set out in Annex V shall apply.

3. The results of the measurements made to verify compliance with the emission limit values shall be standardised with respect to the conditions laid down in Article 11.

4. In the case of co-incineration of untreated mixed municipal waste, the limit values will be determined according to Annex V, and Annex II will not apply.

5. Without prejudice to the provisions of the Treaty, Member States may set emission limit values for polycyclic aromatic hydrocarbons or other pollutants.

Article 8

Water discharges from the cleaning of exhaust gases

1. Waste water from the cleaning of exhaust gases discharged from an incineration or co-incineration plant shall be subject to a permit granted by the competent authorities.

2. Discharges to the aquatic environment of waste water resulting from the cleaning of exhaust gases shall be limited as far as practicable, at least in accordance with the emission limit values set in Annex IV.

3. Subject to a specific provision in the permit, the waste water from the cleaning of exhaust gases may be discharged to the aquatic environment after separate treatment on condition that:

(a) the requirements of relevant Community, national and local provisions are complied with in the form of emission limit values; and

(b) the mass concentrations of the polluting substances referred to in Annex IV do not exceed the emission limit values laid down therein.

4. The emission limit values shall apply at the point where waste waters from the cleaning of exhaust gases containing the polluting substances referred to in Annex IV are discharged from the incineration or co-incineration plant.

Where the waste water from the cleaning of exhaust gases is treated on site collectively with other on-site sources of waste water, the operator shall take the measurements referred to in Article 11:

(a) on the waste water stream from the exhaust gas cleaning processes prior to its input into the collective waste water treatment plant;

(b) on the other waste water stream or streams prior to its or their input into the collective waste water treatment plant;

(c) at the point of final waste water discharge, after the treatment, from the incineration plant or co-incineration plant.

The operator shall take appropriate mass balance calculations in order to determine the emission levels in the final waste water discharge that can

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be attributed to the waste water arising from the cleaning of exhaust gases in order to check compliance with the emission limit values set out in Annex IV for the waste water stream from the exhaust gas cleaning process.

Under no circumstances shall dilution of waste water take place for the purpose of complying with the emission limit values set in Annex IV.

5. When waste waters from the cleaning of exhaust gases containing the polluting substances referred to in Annex IV are treated outside the incineration or co-incineration plant at a treatment plant intended only for the treatment of this sort of waste water, the emission limit values of Annex IV are to be applied at the point where the waste waters leave the treatment plant. If this off-site treatment plant is not only dedicated to treat waste water from incineration, the operator shall take the appropriate mass balance calculations, as provided for under paragraph 4(a), (b) and (c), in order to determine the emission levels in the final waste water discharge that can be attributed to the waste water arising from the cleaning of exhaust gases in order to check compliance with the emission limit values set out in Annex IV for the waste water stream from the exhaust gas cleaning process.

Under no circumstances shall dilution of waste water take place for the purpose of complying with the emission limit values set in Annex IV.

6. The permit shall:

(a) establish emission limit values for the polluting substances referred to in Annex IV, in accordance with paragraph 2 and in order to meet the requirements referred to in paragraph 3(a);

(b) set operational control parameters for waste water at least for pH, temperature and flow.

7. Incineration and co-incineration plant sites, including associated storage areas for wastes, shall be designed and in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater in accordance with the provisions provided for in relevant Community legislation. Moreover, storage capacity shall be provided for contaminated rainwater run-off from the incineration or co-incineration plant site or for contaminated water arising from spillage or fire-fighting operations.

The storage capacity shall be adequate to ensure that such waters can be tested and treated before discharge where necessary.

8. Without prejudice to the provisions of the Treaty, Member States may set emission limit values for polycyclic aromatic hydrocarbons or other pollutants.

Article 9

Residues

Residues resulting from the operation of the incineration or co-incineration plant shall be minimised in their amount and harmfulness. Residues shall be recycled, where appropriate, directly in the plant or outside in accordance with relevant Community legislation.

Transport and intermediate storage of dry residues in the form of dust, such as boiler dust and dry residues from the treatment of combustion gases, shall take place in such a way as to prevent dispersal in the environment e.g. in closed containers.

Prior to determining the routes for the disposal or recycling of the residues from incineration and co-incineration plants, appropriate tests shall be carried out to establish the physical and chemical characteristics and the polluting potential of the different incineration residues. The analysis shall concern the total soluble fraction and heavy metals soluble fraction.

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Article 10

Control and monitoring

1. Measurement equipment shall be installed and techniques used in order to monitor the parameters, conditions and mass concentrations relevant to the incineration or co-incineration process.

2. The measurement requirements shall be laid down in the permit or in the conditions attached to the permit issued by the competent authority.

3. The appropriate installation and the functioning of the automated monitoring equipment for emissions into air and water shall be subject to control and to an annual surveillance test. Calibration has to be done by means of parallel measurements with the reference methods at least every three years.

4. The location of the sampling or measurement points shall be laid down by the competent authority.

5. Periodic measurements of the emissions into the air and water shall be carried out in accordance with Annex III, points 1 and 2.

Article 11

Measurement requirements

1. Member States shall, either by specification in the conditions of the permit or by general binding rules, ensure that paragraphs 2 to 12 and 17, as regards air, and paragraphs 9 and 14 to 17, as regards water, are complied with.

2. The following measurements of air pollutants shall be carried out in accordance with Annex III at the incineration and co-incineration plant:

(a) continuous measurements of the following substances: NO_x, provided that emission limit values are set, CO, total dust, TOC, HCl, HF, SO_2;

(b) continuous measurements of the following process operation parameters: temperature near the inner wall or at another representative point of the combustion chamber as authorised by the competent authority, concentration of oxygen, pressure, temperature and water vapour content of the exhaust gas;

(c) at least two measurements per year of heavy metals, dioxins and furans; one measurement at least every three months shall however be carried out for the first 12 months of operation. Member States may fix measurement periods where they have set emission limit values for polycyclic aromatic hydrocarbons or other pollutants.

3. The residence time as well as the minimum temperature and the oxygen content of the exhaust gases shall be subject to appropriate verification, at least once when the incineration or co-incineration plant is brought into service and under the most unfavourable operating conditions anticipated.

4. The continuous measurement of HF may be omitted if treatment stages for HCl are used which ensure that the emission limit value for HCl is not being exceeded. In this case the emissions of HF shall be subject to periodic measurements as laid down in paragraph 2(c).

5. The continuous measurement of the water vapour content shall not be required if the sampled exhaust gas is dried before the emissions are analysed.

6. Periodic measurements as laid down in paragraph 2(c) of HCl, HF and SO_2 instead of continuous measuring may be authorised in the

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permit by the competent authority in incineration or co-incineration plants, if the operator can prove that the emissions of those pollutants can under no circumstances be higher than the prescribed emission limit values.

►M1 7. The reduction of the frequency of the periodic measurements for heavy metals from twice a year to once every two years and for dioxins and furans from twice a year to once a year may be authorised in the permit by the competent authority provided that the emissions resulting from co-incineration or incineration are below 50 % of the emission limit values determined in accordance with Annex II or Annex V respectively and that criteria for the requirements to be met are available. The Commission shall adopt measures establishing these criteria, based at least on the provisions of points (a) and (d) of the second subparagraph. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 17(2). ◄

Until 1 January 2005 the reduction of the frequency may be authorised even if no such criteria are available provided that:

(a) the waste to be co-incinerated or incinerated consists only of certain sorted combustible fractions of non-hazardous waste not suitable for recycling and presenting certain characteristics, and which is further specified on the basis of the assessment referred to in subparagraph (d);

(b) national quality criteria, which have been reported to the Commission, are available for these wastes;

(c) co-incineration and incineration of these wastes is in line with the relevant waste management plans referred to in Article 7 of Directive 75/442/EEC;

(d) the operator can prove to the competent authority that the emissions are under all circumstances significantly below the emission limit values set out in Annex II or Annex V for heavy metals, dioxins and furans; this assessment shall be based on information on the quality of the waste concerned and measurements of the emissions of the said pollutants;

(e) the quality criteria and the new period for the periodic measurements are specified in the permit; and

(f) all decisions on the frequency of measurements referred to in this paragraph, supplemented with information on the amount and quality of the waste concerned, shall be communicated on a yearly basis to the Commission.

8. The results of the measurements made to verify compliance with the emission limit values shall be standardised at the following conditions and for oxygen according to the formula as referred to in Annex VI:

(a) Temperature 273 K, pressure 101,3 kPa, 11 % oxygen, dry gas, in exhaust gas of incineration plants;

(b) Temperature 273 K, pressure 101,3 kPa, 3 % oxygen, dry gas, in exhaust gas of incineration of waste oil as defined in Directive 75/439/EEC;

(c) when the wastes are incinerated or co-incinerated in an oxygen-enriched atmosphere, the results of the measurements can be standardised at an oxygen content laid down by the competent authority reflecting the special circumstances of the individual case;

(d) in the case of co-incineration, the results of the measurements shall be standardised at a total oxygen content as calculated in Annex II.

When the emissions of pollutants are reduced by exhaust gas treatment in an incineration or co-incineration plant treating hazardous waste, the

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standardisation with respect to the oxygen contents provided for in the first subparagraph shall be done only if the oxygen content measured over the same period as for the pollutant concerned exceeds the relevant standard oxygen content.

9. All measurement results shall be recorded, processed and presented in an appropriate fashion in order to enable the competent authorities to verify compliance with the permitted operating conditions and emission limit values laid down in this Directive in accordance with procedures to be decided upon by those authorities.

10. The emission limit values for air shall be regarded as being complied with if:

(a) — none of the daily average values exceeds any of the emission limit values set out in Annex V(a) or Annex II;

— 97 % of the daily average value over the year does not exceed the emission limit value set out in Annex V(e) first indent;

(b) either none of the half-hourly average values exceeds any of the emission limit values set out in Annex V(b), column A or, where relevant, 97 % of the half-hourly average values over the year do not exceed any of the emission limit values set out in Annex V(b), column B;

(c) none of the average values over the sample period set out for heavy metals and dioxins and furans exceeds the emission limit values set out in Annex V(c) and (d) or Annex II;

(d) the provisions of Annex V(e), second indent or Annex II, are met.

11. The half-hourly average values and the 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-off periods if no waste is being incinerated) from the measured values after having subtracted the value of the confidence interval specified in point 3 of Annex III. The daily average values shall be determined from those validated average values.

To obtain a valid daily average value no more than five half-hourly average values in any day shall be discarded due to malfunction or maintenance of the continuous measurement system. No more than ten daily average values per year shall be discarded due to malfunction or maintenance of the continuous measurement system.

12. The average values over the sample period and the average values in the case of periodical measurements of HF, HCl and SO_2 shall be determined in accordance with the requirements of Article 10(2) and (4) and Annex III.

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13. The Commission shall determine, as soon as appropriate measurement techniques are available within the Community, the date from which continuous measurements of the air emission limit values for heavy metals, dioxins and furans shall be carried out in accordance with Annex III. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 17(2).

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14. The following measurements shall be carried out at the point of waste water discharge:

(a) continuous measurements of the parameters referred to in Article 8(6)(b);

(b) spot sample daily measurements of total suspended solids; Member States may alternatively provide for measurements of a flow proportional representative sample over a period of 24 hours;

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(c) at least monthly measurements of a flow proportional representative sample of the discharge over a period of 24 hours of the polluting substances referred to in Article 8(3) with respect to items 2 to 10 in Annex IV;

(d) at least every six months measurements of dioxins and furans; however one measurement at least every three months shall be carried out for the first 12 months of operation. Member States may fix measurement periods where they have set emission limit values for polycyclic aromatic hydrocarbons or other pollutants.

15. The monitoring of the mass of pollutants in the treated waste water shall be done in conformity with Community legislation and laid down in the permit as well as the frequency of the measurements.

16. The emission limit values for water shall be regarded as being complied with if:

(a) for total suspended solids (polluting substance number 1), 95 % and 100 % of the measured values do not exceed the respective emission limit values as set out in Annex IV;

(b) for heavy metals (polluting substances number 2 to 10) no more than one measurement per year exceeds the emission limit values set out in Annex IV; or, if the Member State provides for more than 20 samples per year, no more than 5 % of these samples exceed the emission limit values set out in Annex IV;

(c) for dioxins and furans (polluting substance 11), the twice-yearly measurements do not exceed the emission limit value set out in Annex IV.

17. Should the measurements taken show that the emission limit values for air or water laid down in this Directive have been exceeded, the competent authorities shall be informed without delay.

Article 12

Access to information and public participation

1. Without prejudice to Council Directive 90/313/EEC [1] and Directive 96/61/EC, applications for new permits for incineration and co-incineration plants shall be made available at one or more locations accessible to the public, such as local authority offices, for an appropriate period to enable it to comment on them before the competent authority reaches a decision. That decision, including at least a copy of the permit, and any subsequent updates, shall also be made available to the public.

2. For incineration or co-incineration plants with a nominal capacity of two tonnes or more per hour and notwithstanding Article 15(2) of Directive 96/61/EC, an annual report to be provided by the operator to the competent authority on the functioning and monitoring of the plant shall be made available to the public. This report shall, as a minimum requirement, give an account of the running of the process and the emissions into air and water compared with the emission standards in this Directive. A list of incineration or co-incineration plants with a nominal capacity of less than two tonnes per hour shall be drawn up by the competent authority and shall be made available to the public.

[1] Council Directive 90/313/EEC of 7 June 1990 on the freedom of access to information on the environment (OJ L 158, 23.6.1990, p. 56). Directive as last amended by the Accession Act of 1994.

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Article 13

Abnormal operating conditions

1. The competent authority shall lay down in the permit the maximum permissible period of any technically unavoidable stoppages, disturbances, or failures of the purification devices or the measurement devices, during which the concentrations in the discharges into the air and the purified waste water of the regulated substances may exceed the prescribed emission limit values.

2. In the case of a breakdown, the operator shall reduce or close down operations as soon as practicable until normal operations can be restored.

3. Without prejudice to Article 6(3)(c), the incineration plant or co-incineration plant or incineration line shall under no circumstances continue to incinerate waste for a period of more than four hours uninterrupted where emission limit values are exceeded; moreover, the cumulative duration of operation in such conditions over one year shall be less than 60 hours. The 60-hour duration applies to those lines of the entire plant which are linked to one single flue gas cleaning device.

4. The total dust content of the emissions into the air of an incineration plant shall under no circumstances exceed 150 mg/m^3 expressed as a half-hourly average; moreover the air emission limit values for CO and TOC shall not be exceeded. All other conditions referred to in Article 6 shall be complied with.

Article 14

Review clause

Without prejudice to Directive 96/61/EC, the Commission shall submit a report to the European Parliament and the Council before 31 December 2008 based on experience of the application of this Directive, in particular for new plants, and on the progress achieved in emission control techniques and experience in waste management. Furthermore, the report shall be based on the development of the state of technology, of experience in the operation of the plants, of environmental requirements. This report will include a specific section on the application of Annex II.1.1. and in particular on the economic and technical feasibility for existing cement kilns as referred to in the footnote to Annex II.1.1. of respecting the NO_x emission limit value for new cement kilns set out in that Annex. The report shall, as appropriate, be accompanied by proposals for revision of the related provisions of this Directive. However, the Commission shall, if appropriate, propose an amendment for Annex II.3 before the said report, if major waste streams are directed to types of co-incineration plants other than those dealt with in Annex II.1 and II.2.

Article 15

Reporting

The reports on the implementation of this Directive shall be established in accordance with the procedure laid down in Article 5 of Council Directive 91/692/EEC. The first report shall cover at least the first full three-year period after 28 December 2002 and comply with the periods referred to in Article 17 of Directive 94/67/EC and in Article 16(3) of Directive 96/61/EC. To this effect, the Commission shall elaborate the appropriate questionnaire in due time.

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Article 16

Adaptation to technical progress or new findings

The Commission shall adopt measures designed to amend non-essential elements of this Directive and adapting Articles 10, 11 and 13 and Annexes I and III to technical progress or new findings concerning the health benefits of emission reductions in accordance with the regulatory procedure with scrutiny referred to in Article 17(2).

Article 17

Committee procedure

1. The Commission shall be assisted by a committee.

2. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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Article 18

Repeal

The following shall be repealed as from 28 December 2005:

(a) Article 8(1) and the Annex to Directive 75/439/EEC;

(b) Directive 89/369/EEC;

(c) Directive 89/429/EEC;

(d) Directive 94/67/EC.

Article 19

Penalties

The Member States shall determine penalties applicable to breaches of the national provisions adopted pursuant to this Directive. The penalties thus provided for shall be effective, proportionate and dissuasive. The Member States shall notify those provisions to the Commission by 28 December 2002 at the latest and shall notify it without delay of any subsequent amendment affecting them.

Article 20

Transitional provisions

1. Without prejudice to the specific transitional provisions provided for in the Annexes to this Directive, the provisions of this Directive shall apply to existing plants as from 28 December 2005.

2. For new plants, i.e. plants not falling under the definition of ‘existing incineration or co-incineration plant’ in Article 3(6) or paragraph 3 of this Article, this Directive, instead of the Directives mentioned in Article 18, shall apply as from 28 December 2002.

3. Stationary or mobile plants whose purpose is the generation of energy or production of material products and which are in operation and have a permit in accordance with existing Community legislation where required and which start co-incinerating waste not later than 28 December 2004 are to be regarded as existing co-incineration plants.

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Article 21

Implementation

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 28 December 2002. They shall forthwith inform the Commission thereof.

When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by the Member States.

2. Member States shall communicate to the Commission the text of the provisions of domestic law which they adopt in the field governed by this Directive.

Article 22

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

Article 23

Addressees

This Directive is addressed to the Member States.

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ANNEX I

Equivalence factors for dibenzo-p-dioxins and dibenzofurans

For the determination of the total concentration (TE) of dioxins and furans, the mass concentrations of the following dibenzo-p-dioxins and dibenzofurans shall be multiplied by the following equivalence factors before summing:

		Toxic equivalence factor
2,3,7,8	— Tetrachlorodibenzodioxin (TCDD)	1
1,2,3,7,8	— Pentachlorodibenzodioxin (PeCDD)	0,5
1,2,3,4,7,8	— Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,6,7,8	— Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,7,8,9	— Hexachlorodibenzodioxin (HxCDD)	0,1
1,2,3,4,6,7,8	— Heptachlorodibenzodioxin (HpCDD)	0,01
	— Octachlorodibenzodioxin (OCDD)	0,001
2,3,7,8	— Tetrachlorodibenzofuran (TCDF)	0,1
2,3,4,7,8	— Pentachlorodibenzofuran (PeCDF)	0,5
1,2,3,7,8	— Pentachlorodibenzofuran (PeCDF)	0,05
1,2,3,4,7,8	— Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,6,7,8	— Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,7,8,9	— Hexachlorodibenzofuran (HxCDF)	0,1
2,3,4,6,7,8	— Hexachlorodibenzofuran (HxCDF)	0,1
1,2,3,4,6,7,8	— Heptachlorodibenzofuran (HpCDF)	0,01
1,2,3,4,7,8,9	— Heptachlorodibenzofuran (HpCDF)	0,01
	— Octachlorodibenzofuran (OCDF)	0,001

▼B

ANNEX II

DETERMINATION OF AIR EMISSION LIMIT VALUES FOR THE CO-INCINERATION OF WASTE

The following formula (mixing rule) is to be applied whenever a specific total emission limit value 'C' has not been set out in a table in this Annex.

The limit value for each relevant pollutant and carbon monoxide in the exhaust gas resulting from the co-incineration of waste shall be calculated as follows:

$$\frac{V_{waste} \times C_{waste} + V_{proc} \times C_{proc}}{V_{waste} + V_{proc1}} = C$$

V_{waste}: exhaust gas volume resulting from the incineration of waste only determined from the waste with the lowest calorific value specified in the permit and standardised at the conditions given by this Directive.

If the resulting heat release from the incineration of hazardous waste amounts to less than 10 % of the total heat released in the plant, V_{waste} must be calculated from a (notional) quantity of waste that, being incinerated, would equal 10 % heat release, the total heat release being fixed.

C_{waste}: emission limit values set for incineration plants in Annex V for the relevant pollutants and carbon monoxide.

V_{proc}: exhaust gas volume resulting from the plant process including the combustion of the authorised fuels normally used in the plant (wastes excluded) determined on the basis of oxygen contents at which the emissions must be standardised as laid down in Community or national regulations. In the absence of regulations for this kind of plant, the real oxygen content in the exhaust gas without being thinned by addition of air unnecessary for the process must be used. The standardisation at the other conditions is given in this Directive.

C_{proc}: emission limit values as laid down in the tables of this annex for certain industrial sectors or in case of the absence of such a table or such values, emission limit values of the relevant pollutants and carbon monoxide in the flue gas of plants which comply with the national laws, regulations and administrative provisions for such plants while burning the normally authorised fuels (wastes excluded). In the absence of these measures the emission limit values laid down in the permit are used. In the absence of such permit values the real mass concentrations are used.

C: total emission limit values and oxygen content as laid down in the tables of this annex for certain industrial sectors and certain pollutants or in case of the absence of such a table or such values total emission limit values for CO and the relevant pollutants replacing the emission limit values as laid down in specific Annexes of this Directive. The total oxygen content to replace the oxygen content for the standardisation is calculated on the basis of the content above respecting the partial volumes.

Member States may lay down rules governing the exemptions provided for in this Annex.

II.1. **Special provisions for cement kilns co-incinerating waste**

Daily average values (for continuous measurements) Sample periods and other measurement requirements as in Article 7. All values in mg/m^3 (Dioxins and furans ng/m^3). Half-hourly average values shall only be needed in view of calculating the daily average values.

The results of the measurements made to verify compliance with the emission limit values shall be standardised at the following conditions: Temperature 273 K, pressure 101,3 kPa, 10 % oxygen, dry gas.

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II.1.1. *C — total emission limit values*

Pollutant	C
Total dust	30
HCI	10
HF	1
NO_x for existing plants	800
NO_x for new plants	500 ([1])
Cd + Tl	0,05
Hg	0,05
Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V	0,5
Dioxins and furans	0,1

([1]) For the implementation of the NO_x emission limit values, cement kilns which are in operation and have a permit in accordance with existing Community legislation and which start co-incinerating waste after the date mentioned in Article 20(3) are not to be regarded as new plants.

Until 1 January 2008, exemptions for NO_x may be authorised by the competent authorities for existing wet process cement kilns or cement kilns which burn less than three tonnes of waste per hour, provided that the permit foresees a total emission limit value for NO_x of not more than 1200 mg/m^3.

Until 1 January 2008, exemptions for dust may be authorised by the competent authority for cement kilns which burn less than three tonnes of waste per hour, provided that the permit foresees a total emission limit value of not more than 50 mg/m^3.

II.1.2. *C — total emission limit values for SO_2 and TOC*

Pollutant	C
SO_2	50
TOC	10

Exemptions may be authorised by the competent authority in cases where TOC and SO_2 do not result from the incineration of waste.

II.1.3. *Emission limit value for CO*

Emission limit values for CO can be set by the competent authority.

II.2. **Special provisions for combustion plants co-incinerating waste**

II.2.1. *Daily average values*

▼M1

Where, for large combustion plants, more stringent emission limit values are set under Directive 2001/80/EC or will be set under other Community legislation, those emission limit values shall replace, for the plants and pollutants concerned, the emission limit values laid down in the following tables (Cproc). In that case, the Commission shall adapt those tables to the more stringent emission limit values. Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 17(2), without delay.

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Half-hourly average values shall only be needed in view of calculating the daily average values.

C_{proc}:

C_{proc} for solid fuels expressed in mg/Nm^3 (O_2 content 6 %):

▼B

Pollutants	< 50 MWth	50-100 MWth	100 to 300 MWth	> 300 MWth
SO_2				
general case		850	850 to 200 (linear decrease from 100 to 300 MWth)	200
indigenous fuels		or rate of desulphurisation ≥90%	or rate of desulphurisation ≥92%	or rate of desulphurisation ≥95%
NO_x		400	300	200
Dust	50	50	30	30

Until 1 January 2007 and without prejudice to relevant Community legislation, the emission limit value for NO_x does not apply to plants only co-incinerating hazardous waste.

Until 1 January 2008, exemptions for NO_x and SO_2 may be authorised by the competent authorities for existing co-incineration plants between 100 and 300 MWth using fluidised bed technology and burning solid fuels provided that the permit foresees a C_{proc} value of not more than 350 mg/Nm^3 for NO_x and not more than 850 to 400 mg/Nm^3 (linear decrease from 100 to 300 MWth) for SO_2.

C_{proc} for biomass expressed in mg/Nm^3 (O_2 content 6 %):

'Biomass' means: products consisting of any whole or part of a vegetable matter from agriculture or forestry, which can be used for the purpose of recovering its energy content as well as wastes listed in Article 2(2)(a)(i) to (v).

Pollutants	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2		200	200	200
NO_x		350	300	300
Dust	50	50	30	30

Until 1 January 2008, exemptions for NO_x may be authorised by the competent authorities for existing co-incineration plants between 100 and 300 MWth using fluidised bed technology and burning biomass provided that the permit foresees a C_{proc} value of not more than 350 mg/Nm^3.

C_{proc} for liquid fuels expressed in mg/Nm^3 (O_2 content 3 %):

Pollutants	< 50 MWth	50 to 100 MWth	100 to 300 MWth	> 300 MWth
SO_2		850	850 to 200 (linear decrease from 100 to 300 MWth)	200
NO_x		400	300	200
Dust	50	50	30	30

II.2.2. *C — total emission limit values*

C expressed in mg/Nm^3 (O_2 content 6 %). All average values over the sample period of a minimum of 30 minutes and a maximum of 8 hours:

Pollutant	C
Cd + Tl	0,05
Hg	0,05
Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V	0,5

C expressed in ng/Nm^3 (O_2 content 6 %). All average values measured over the sample period of a minimum of 6 hours and a maximum of 8 hours:

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Pollutant	C
Dioxins and furans	0,1

II.3. **Special provisions for industrial sectors not covered under II.1 or II.2 co-incinerating waste**

II.3.1. *C — total emission limit values:*

C expressed in ng/Nm^3. All average values measured over the sample period of a minimum of 6 hours and a maximum of 8 hours:

Pollutant	C
Dioxins and furans	0,1

C expressed in mg/Nm^3. All average values over the sample period of a minimum of 30 minutes and a maximum of 8 hours:

Pollutant	C
Cd + Tl	0,05
Hg	0,05

▼B

ANNEX III

Measurement techniques

1. Measurements for the determination of concentrations of air and water polluting substances have to be carried out representatively.

2. Sampling and analysis of all pollutants including dioxins and furans as well as reference measurement methods to calibrate automated measurement systems shall be carried out as given by CEN-standards. If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.

3. At the daily emission limit value level, the values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide:	10 %
Sulphur dioxide:	20 %
Nitrogen dioxide:	20 %
Total dust:	30 %
Total organic carbon:	30 %
Hydrogen chloride:	40 %
Hydrogen fluoride:	40 %.

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ANNEX IV

Emission limit values for discharges of waste water from the cleaning of exhaust gases

Polluting substances	Emission limit values expressed in mass concentrations for unfiltered samples	
1. Total suspended solids as defined by Directive 91/271/EEC	95% / $30 mg/l$	100% / $45 mg/l$
2. Mercury and its compounds, expressed as mercury (Hg)	0,03 mg/l	
3. Cadmium and its compounds, expressed as cadmium (Cd)	0,05 mg/l	
4. Thallium and its compounds, expressed as thallium (Tl)	0,05 mg/l	
5. Arsenic and its compounds, expressed as arsenic (As)	0,15 mg/l	
6. Lead and its compounds, expressed as lead (Pb)	0,2 mg/l	
7. Chromium and its compounds, expressed as chromium (Cr)	0,5 mg/l	
8. Copper and its compounds, expressed as copper (Cu)	0,5 mg/l	
9. Nickel and its compounds, expressed as nickel (Ni)	0,5 mg/l	
10. Zinc and its compounds, expressed as zinc (Zn)	1,5 mg/l	
11. Dioxins and furans, defined as the sum of the individual dioxins and furans evaluated in accordance with Annex I	►C1 0,3 ng/l ◄	

Until 1 January 2008, exemptions for total suspended solids may be authorised by the competent authority for existing incineration plants provided the permit foresees that 80 % of the measured values do not exceed 30 mg/l and none of them exceed 45 mg/l.

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ANNEX V

AIR EMISSION LIMIT VALUES

(a) **Daily average values**

Total dust	10 mg/m^3
Gaseous and vaporous organic substances, expressed as total organic carbon	10 mg/m^3
Hydrogen chloride (HCl)	10 mg/m^3
Hydrogen fluoride (HF)	1 mg/m^3
Sulphur dioxide (SO_2)	50 mg/m^3
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2) expressed as nitrogen dioxide for existing incineration plants with a nominal capacity exceeding 6 tonnes per hour or new incineration plants	200 mg/m^3 (*)
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as nitrogen dioxide for existing incineration plants with a nominal capacity of 6 tonnes per hour or less	400 mg/m^3 (*)

(*) Until 1 January 2007 and without prejudice to relevant (Community) legislation the emission limit value for NO_x does not apply to plants only incinerating hazardous waste.

Exemptions for NO_x may be authorised by the competent authority for existing incineration plants:

— with a nominal capacity of 6 tonnes per hour, provided that the permit foresees the daily average values do not exceed 500 mg/m^3 and this until 1 January 2008,

— with a nominal capacity of >6 tonnes per hour but equal or less than 16 tonnes per hour, provided the permit foresees the daily average values do not exceed 400 mg/m^3 and this until 1 January 2010,

— with a nominal capacity of >16 tonnes per hour but <25 tonnes per hour and which do not produce water discharges, provided that the permit foresees the daily average values do not exceed 400 mg/m^3 and this until 1 January 2008.

Until 1 January 2008, exemptions for dust may be authorised by the competent authority for existing incinerating plants, provided that the permit foresees the daily average values do not exceed 20 mg/m^3.

(b) **Half-hourly average values**

	(100 %) A	(97 %) B
Total dust	30 mg/m^3	10 mg/m^3
Gaseous and vaporous organic substances, expressed as total organic carbon	20 mg/m^3	10 mg/m^3
Hydrogen chloride (HCl)	60 mg/m^3	10 mg/m^3
Hydrogen fluoride (HF)	4 mg/m^3	2 mg/m^3
Sulphur dioxide (SO_2)	200 mg/m^3	50 mg/m^3
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as nitrogen dixoide for existing incineration plants with a nominal capacity exceeding 6 tonnes per hour or new incineration plants	400 mg/m^3 (*)	200 mg/m^3 (*)

(*) Until 1 January 2007 and without prejudice to relevant Community legislation the emission limit value for NO_x does not apply to plants only incinerating hazardous waste.

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Until 1 January 2010, exemptions for NO_x may be authorised by the competent authority for existing incineration plants with a nominal capacity between 6 and 16 tonnes per hour, provided the half-hourly average value does not exceed 600 mg/m^3 for column A or 400 mg/m^3 for column B.

(c) **All average values over the sample period of a minimum of 30 minutes and a maximum of 8 hours**

Cadmium and its compounds, expressed as cadmium (Cd)		
Thallium and its compounds, expressed as thallium (Tl)	total 0,05 mg/m^3	total 0,1 mg/m^3 (*)
Mercury and its compounds, expressed as mercury (Hg)	0,05 mg/m^3	0,1 mg/m^3 (*)
Antimony and its compounds, expressed as antimony (Sb)		
Arsenic and its compounds, expressed as arsenic (As)		
Lead and its compounds, expressed as lead (Pb)		
Chromium and its compounds, expressed as chromium (Cr)		
Cobalt and its compounds, expressed as cobalt (Co)	total 0,5 mg/m^3	total 1 mg/m^3 (*)
Copper and its compounds, expressed as copper (Cu)		
Manganese and its compounds, expressed as manganese (Mn)		
Nickel and its compounds, expressed as nickel (Ni)		
Vanadium and its compounds, expressed as vanadium (V)		

(*) Until 1 January 2007 average values for existing plants for which the permit to operate has been granted before 31 December 1996, and which incinerate hazardous waste only.

These average values cover also gaseous and the vapour forms of the relevant heavy metal emissions as well as their compounds.

(d) **Average values shall be measured over a sample period of a minimum of 6 hours and a maximum of 8 hours. The emission limit value refers to the total concentration of dioxins and furans calculated using the concept of toxic equivalence in accordance with Annex I.**

Dioxins and furans	0,1 ng/m^3

(e) **The following emission limit values of carbon monoxide (CO) concentrations shall not be exceeded in the combustion gases (excluding the start-up and shut-down phase):**

— 50 milligrams/m^3 of combustion gas determined as daily average value;

— 150 milligrams/m^3 of combustion gas of at least 95 % of all measurements determined as 10-minute average values or 100 mg/m^3 of combustion gas of all measurements determined as half-hourly average values taken in any 24-hour period.

Exemptions may be authorised by the competent authority for incineration plants using fluidised bed technology, provided that the permit foresees an emission limit value for carbon monoxide (CO) of not more than 100 mg/m^3 as an hourly average value.

(f) **Member States may lay down rules governing the exemptions provided for in this Annex.**

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ANNEX VI

Formula to calculate the emission concentration at the standard percentage oxygen concentration

$$E_S = \frac{21 - O_S}{21 - O_M} \times E_M$$

E_S = calculated emission concentration at the standard percentage oxygen concentration

E_M = measured emission concentration

O_S = standard oxygen concentration

O_M = measured oxygen concentration

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COUNCIL DIRECTIVE 1999/13/EC

of 11 March 1999

on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations

(OJ L 85, 29.3.1999, p. 1)

Amended by:

		Official Journal		
		No	page	date
►**M1**	Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003	L 284	1	31.10.2003
►**M2**	Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004	L 143	87	30.4.2004
►**M3**	Directive 2008/112/EC of the European Parliament and of the Council of 16 December 2008	L 345	68	23.12.2008

Corrected by:

►**C1** Corrigendum, OJ L 188, 21.7.1999, p. 54 (1999/13/EC)

►**C2** Corrigendum, OJ L 240, 10.9.1999, p. 24 (1999/13/EC)

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COUNCIL DIRECTIVE 1999/13/EC

of 11 March 1999

on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 130s(1) thereof,

Having regard to the proposal from the Commission ([1]),

Having regard to the opinion of the Economic and Social Committee ([2]),

Acting in accordance with the procedure laid down in Article 189c of the Treaty ([3]),

(1) Whereas the European Community action programme on the environment approved by the Council and the representatives of the Governments of the Member States meeting within the Council by resolutions of 22 November 1973 ([4]), 17 May 1977 ([5]), 7 February 1983 ([6]), 19 October 1987 ([7]) and 1 February 1993 ([8]) stresses the importance of the prevention and reduction of air pollution;

(2) Whereas in particular the resolution of 19 October 1987 emphasises the importance of Community action to concentrate, *inter alia*, on implementation of appropriate standards in order to ensure a high level of public health and environmental protection;

(3) Whereas the European Community and its Member States are parties to the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution concerning the control of emissions of volatile organic compounds in order to reduce their transboundary fluxes and the fluxes of the resulting secondary photochemical oxidant products so as to protect human health and the environment from adverse effects;

(4) Whereas pollution due to volatile organic compounds in one Member State often influences the air and water of other Member States; whereas, in accordance with Article 130r of the Treaty, action at Community level is necessary;

(5) Whereas, because of their characteristics, the use of organic solvents in certain activities and installations gives rise to emissions of organic compounds into the air which can be harmful for public health and/or contributes to the local and transboundary formation of photochemical oxidants in the boundary layer of the troposphere which cause damage

([1]) OJ C 99, 26.3.1997, p. 32.
([2]) OJ C 287, 22.9.1997, p. 55.
([3]) Opinion of the European Parliament of 14 January 1998 (OJ C 34, 2.2.1998, p. 75), Council Common Position of 16 June 1998 (OJ C 248, 7.8.1998, p. 1) and Decision of the European Parliament of 21 October 1998 (OJ C 341, 9.11.1998, p. 70).
([4]) OJ C 112, 20.12.1973, p. 1.
([5]) OJ C 139, 13.6.1977, p. 1.
([6]) OJ C 46, 17.2.1983, p. 1.
([7]) OJ C 328, 7.12.1987, p. 1.
([8]) OJ C 138, 1.2.1993, p. 1.

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to natural resources of vital environmental and economic importance and, under certain exposure conditions, has harmful effects on human health;

(6) Whereas the high incidence of high tropospheric ozone concentrations in recent years has triggered widespread concern regarding the impact on public health and the environment;

(7) Whereas, therefore, preventive action is required to protect public health and the environment against the consequences of particularly harmful emissions from the use of organic solvents and to guarantee citizens the right to a clean and healthy environment;

(8) Whereas emissions of organic compounds can be avoided or reduced in many activities and installations because potentially less harmful substitutes are available or will become available within the coming years; whereas, where appropriate substitutes are not available, other technical measures should be taken to reduce emissions into the environment as much as economically and technically feasible;

(9) Whereas the use of organic solvents and the emissions of organic compounds which have the most serious effects on public health should be reduced as much as technically feasible;

(10) Whereas installations and processes which fall under this Directive should at least be registered if they are not subject to authorisation under Community or national legislation;

(11) Whereas existing installations and activities should, where appropriate, be adapted so that within an appropriate period they meet the requirements established for new installations and activities; whereas that period should be consistent with the timetable for compliance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control ([1]);

(12) Whereas the relevant parts of existing installations which undergo substantial change must, as a matter of principle, meet the new installation standards for the substantially changed equipment;

(13) Whereas organic solvents are used by many different types of installations and activities so that, in addition to general requirements, specific requirements should be defined and, at the same time, thresholds for the size of the installations or activities which have to comply with this Directive;

(14) Whereas a high level of environmental protection requires the setting and achievement of emission limits for organic compounds and appropriate operating conditions, in accordance with the principle of best available techniques, for certain installations and activities using organic solvents within the Community;

(15) Whereas in some cases Member States may exempt operators from complying with the emission limit values because other measures, such as the use of low-solvent or solvent-free

([1]) OJ L 257, 10.10.1996, p. 26.

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products or techniques, provide alternative means of achieving equivalent emission reductions;

(16) Whereas emission-limiting measures adopted before the entry into force of this Directive should be taken into account in an appropriate way;

(17) Whereas alternative approaches to reduction may allow the objectives of this Directive to be achieved more effectively than by implementing uniform emission limit values; whereas, therefore, Member States may exempt existing installations from compliance with the emission limits if they implement a national plan, which will, within the timetable for implementation of this Directive, lead to an at least equal reduction in emissions of organic compounds from these activities and installations;

(18) Whereas existing installations falling under Directive 96/61/EC which are covered by a national plan can under no circumstances be exempted from the provisions of that Directive, including Article 9(4) thereof;

(19) Whereas in many cases small and medium-sized, new and existing installations may be allowed to comply with somewhat less stringent requirements to maintain their competitiveness;

(20) Whereas for dry cleaning a zero threshold is appropriate, subject to specified exemptions;

(21) Whereas monitoring of emissions is required, including the application of measurement techniques, to assess the mass concentrations or the quantity of the pollutants whose release into the environment is permitted;

(22) Whereas operators should reduce emissions of organic solvents, including fugitive emissions, and of organic compounds; whereas a solvent management plan is an important tool to verify this; whereas, although guidance may be given, the solvent management plan is not developed to the stage where a Community methodology can be established;

(23) Whereas Member States have to establish a procedure to be followed and measures to be taken where emission limitations are exceeded;

(24) Whereas the Commission and the Member States should collaborate in order to ensure that information on the implementation of this Directive and on the progress of substitution options is exchanged,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Purpose and scope

The purpose of this Directive is to prevent or reduce the direct and indirect effects of emissions of volatile organic compounds into the environment, mainly into air, and the potential risks to human health,

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by providing measures and procedures to be implemented for the activities defined in Annex I, in so far as they are operated above the solvent consumption thresholds listed in Annex IIA.

Article 2

Definitions

For the purposes of this Directive:

1. *installation* shall mean a stationary technical unit where one or more activities falling within the scope defined in Article 1 are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions;

2. *existing installation* shall mean an installation in operation or, in accordance with legislation existing before the date on which this Directive is brought into effect, an installation which is authorised or registered or, in the view of the competent authority, the subject of a full request for authorisation, provided that the installation is put into operation no later than one year after the date on which this Directive is brought into effect;

3. *small installation* shall mean an installation which falls within the lower threshold band of items 1, 3, 4, 5, 8, 10, 13, 16 or 17 of Annex IIA or for the other activities of Annex IIA which have a solvent consumption of less than 10 tonnes/year;

4. *substantial change*
   — for an installation falling within the scope of Directive 96/61/EC, shall have the definition specified in that Directive,

   — for a small installation, shall mean a change of the nominal capacity leading to an increase of emissions of volatile organic compounds of more than 25 %. Any change that may have, in the opinion of the competent authority, significant negative effects on human health or the environment is also a substantial change,

   — for all other installations, shall mean a change of the nominal capacity leading to an increase of emissions of volatile organic compounds of more than 10 %. Any change that may have, in the opinion of the competent authority, significant negative effects on human health or the environment is also a substantial change;

5. *competent authority* shall mean the authority or authorities or bodies responsible under the legal provisions of the Member States for carrying out the obligations arising from this Directive;

6. *operator* shall mean any natural or legal person who operates or controls the installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated;

7. *authorisation* shall mean a written decision by which the competent authority grants permission to operate all or part of an installation;

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8. *registration* shall mean a procedure, specified in a legal act, involving at least notification to the competent authority by the operator of the intention to operate an installation or activity falling within the scope of this Directive;

9. *emission* shall mean any discharge of volatile organic compounds from an installation into the environment;

10. *fugitive emissions* shall mean any emissions not in waste gases of volatile organic compounds into air, soil and water as well as, unless otherwise stated in Annex IIA, solvents contained in any products. They include uncaptured emissions released to the outside environment via windows, doors, vents and similar openings;

11. *waste gases* shall mean the final gaseous discharge containing volatile organic compounds or other pollutants, from a stack or abatement equipment into air. The volumetric flow rates shall be expressed in m^3/h at standard conditions;

12. *total emissions* shall mean the sum of fugitive emissions and emissions in waste gases;

13. *emission limit value* shall mean the mass of volatile organic compounds, expressed in terms of certain specific parameters, concentration, percentage and/or level of an emission, calculated at standard conditions, N, which may not be exceeded during one or more periods of time;

14. *substances* shall mean any chemical element and its compounds, as they occur in the natural state or as produced by industry, whether in solid or liquid or gaseous form;

15. ►**M3** *mixture* ◄ shall mean mixtures or solutions composed of two or more substances;

16. *organic compound* shall mean any compound containing at least the element carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates;

17. *volatile organic compound (VOC)* shall mean any organic compound having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use. For the purpose of this Directive, the fraction of creosote which exceeds this value of vapour pressure at 293,15 K shall be considered as a VOC;

18. *organic solvent* shall mean any VOC which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dissolver, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or a plasticiser, or as a preservative;

19. *halogenated organic solvent* shall mean an organic solvent which contains at least one atom of bromine, chlorine, fluorine or iodine per molecule;

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20. *coating* shall mean any ►M3 mixture ◄, including all the organic solvents or ►M3 mixtures ◄ containing organic solvents necessary for its proper application, which is used to provide a decorative, protective or other functional effect on a surface;

21. *adhesive* shall mean any ►M3 mixture ◄, including all the organic solvents or ►M3 mixtures ◄ containing organic solvents necessary for its proper application, which is used to adhere separate parts of a product;

22. *ink* shall mean a ►M3 mixture ◄, including all the organic solvents or ►M3 mixtures ◄ containing organic solvents necessary for its proper application, which is used in a printing activity to impress text or images on to a surface;

23. *varnish* shall mean a transparent coating;

24. *consumption* shall mean the total input of organic solvents into an installation per calendar year, or any other 12-month period, less any VOCs that are recovered for reuse;

25. *input* shall mean the quantity of organic solvents and their quantity in ►M3 mixtures ◄ used when carrying out an activity, including the solvents recycled inside and outside the installation, and which are counted every time they are used to carry out the activity;

26. *reuse of organic solvents* shall mean the use of organic solvents recovered from an installation for any technical or commercial purpose and including use as a fuel but excluding the final disposal of such recovered organic solvent as waste;

27. *mass flow* shall mean the quantity of VOCs released, in unit of mass/hour;

28. *nominal capacity* shall mean the maximum mass input of organic solvents by an installation averaged over one day, if the installation is operated under conditions of normal operation at its design output;

29. *normal operation* shall mean all periods of operation of an installation or activity except start-up and shut-down operations and maintenance of equipment;

30. *contained conditions* shall mean conditions under which an installation is operated such that the VOCs released from the activity are collected and discharged in a controlled way either via a stack or abatement equipment and are therefore not entirely fugitive;

31. *standard conditions* shall mean a temperature of 273,15 K and a pressure of 101,3 kPa;

32. *average over 24 hours* shall mean the arithmetic average of all valid readings taken during the 24-hour period of normal operation;

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33. *start-up and shut-down operations* shall mean operations whilst bringing an activity, an equipment item or a tank into or out of service or into or out of an idling state. Regularly oscillating activity phases are not to be considered as start-ups and shut-downs.

Article 3

Obligations applying to new installations

Member States shall adopt the necessary measures to ensure that:

1. all new installations comply with Articles 5, 8 and 9;

2. all new installations not covered by Directive 96/61/EC are registered or undergo authorisation before being put into operation.

Article 4

Obligations applying to existing installations

Without prejudice to Directive 96/61/EC, Member States shall adopt the necessary measures to ensure that:

1. existing installations comply with Articles 5, 8 and 9 no later than 31 October 2007;

2. all existing installations must have been registered or authorised by 31 October 2007 at the latest;

3. those installations to be authorised or registered using the reduction scheme of Annex IIB notify this to the competent authorities by 31 October 2005 at the latest;

4. where an installation:

   — undergoes a substantial change, or

   — comes within the scope of this Directive for the first time following a substantial change,

   that part of the installation which undergoes the substantial change shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.

Article 5

Requirements

1. Member States shall take the appropriate measures, either by specification in the conditions of the authorisation or by general binding rules to ensure that paragraphs 2 to 12 are complied with.

2. All installations shall comply with:

(a) either the emission limit values in waste gases and the fugitive emission values, or the total emission limit values, and other requirements laid down in Annex IIA;

or

(b) the requirements of the reduction scheme specified in Annex IIB.

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3. (a) For fugitive emissions, Member States shall apply fugitive emission values to installations as an emission limit value. However, where it is demonstrated to the satisfaction of the competent authority that for an individual installation this value is not technically and economically feasible, the competent authority can make an exception for such an individual installation provided that significant risks to human health or the environment are not to be expected. For each derogation, the operator must demonstrate to the satisfaction of the competent authority that the best available technique is being used;

(b) activities which cannot be operated under contained conditions may be exempted from the controls of Annex IIA, when this possibility is explicitly mentioned in that Annex. The reduction scheme of Annex IIB is then to be used, unless it is demonstrated to the satisfaction of the competent authority that this option is not technically and economically feasible. In this case, the operator must demonstrate to the satisfaction of the competent authority that the best available technique is being used.

Member States shall report to the Commission on the derogation concerning paragraphs (a) and (b) in accordance with Article 11.

4. For installations not using the reduction scheme, any abatement equipment installed after the date on which this Directive is brought into effect shall meet all the requirements of Annex IIA.

5. Installations where two or more activities are carried out, each of which exceeds the thresholds in Annex IIA shall:

(a) as regards the substances specified in paragraphs 6, 7 and 8, meet the requirements of those paragraphs for each activity individually;

(b) as regards all other substances, either:

(i) meet the requirements of paragraph 2 for each activity individually; or

(ii) have total emissions not exceeding those that would have resulted had point (i) been applied.

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6. Substances or mixtures which, because of their content of VOCs classified as carcinogens, mutagens or toxic to reproduction under Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures [1] are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F or the risk phrases R45, R46, R49, R60 or R61 shall be replaced, as far as possible and by taking into account the guidance referred to in Article 7(1), by less harmful substances or mixtures within the shortest possible time.

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7. For discharges of the VOCs referred to in paragraph 6, where the mass flow of the sum of the compounds causing the labelling referred to in that paragraph is greater than, or equal to, 10 g/h, an emission limit value of 2 mg/Nm^3 shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

[1] OJ L 353, 31.12.2008, p. 1.

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8. For discharges of halogenated VOCs which are assigned ►M3 the risk phrases R40 or R68 ◄, where the mass flow of the sum of the compounds causing ►M3 the labelling R40 or R68 ◄ is greater than, or equal to, 100 g/h, an emission limit value of 20 mg/Nm^3 shall be complied with. The emission limit value refers to the mass sum of the individual compounds.

The discharge of VOCs referred to in paragraphs 6 and 8 shall be controlled as emissions from an installation under contained conditions as far as technically and economically feasible to safeguard public health and the environment.

9. Discharges of those VOCs which, after the entry into force of this Directive, are assigned or need to carry one of the risk phrases mentioned in paragraphs 6 and 8, shall have to comply with the emission limit values mentioned in paragraphs 7 and 8 respectively, within the shortest possible time.

10. All appropriate precautions shall be taken to minimise emissions during start-up and shut-down.

11. Existing installations which operate existing abatement equipment and comply with the following emission limit values:

— 50 mg C/Nm^3 in the case of incineration,

— 150 mg C/Nm^3 in the case of any other abatement equipment,

shall be exempt from the waste gases emission limit values in the table in Annex IIA for a period of 12 years after the date referred to in Article 15, provided the total emissions of the whole installation do not exceed those that would have resulted had all the requirements of the table been met.

12. Neither the reduction scheme nor the application of paragraph 11 nor Article 6 exempt installations discharging substances specified in paragraphs 6, 7 and 8 from fulfilling the requirements of those paragraphs.

13. Where a risk assessment is carried out in accordance with Council Regulation (EEC) No 793/93 ([1]) and Commission Regulation (EC) No 1488/94 ([2]) or Council Directive 67/548/EEC and Commission Directive 93/67/EEC ([3]) of any of the substances causing ►M3 the risk phrases R40, R68, R60 or R61 ◄ which are controlled under this Directive, the Commission shall consider the conclusions of the risk assessment and shall take the necessary measures as appropriate.

Article 6

National plans

1. Without prejudice to Directive 96/61/EC, Member States may define and implement national plans for reducing emissions from the activities and industrial installations covered by Article 1, excluding activities 4 and 11 of Annex IIA. None of the other activities may be excluded from the scope of this Directive by means of a national plan. These plans shall result in a reduction of the annual emissions of VOCs from existing installations covered by this Directive by at least the same amount and within the same time frame as would have been achieved

([1]) OJ L 84, 5.4.1993, p. 1.
([2]) OJ L 161, 29.6.1994, p. 3.
([3]) OJ L 227, 8.9.1993, p. 9.

▼B

by applying the emission limits under Article 5(2) and (3) and Annex II, during the validity period of the national plan. The national plan, if necessary updated, will be resubmitted to the Commission every three years.

A Member State which defines and implements national plans may exempt existing installations from implementation of the emission limit values laid down in Article 5(2) and (3) and Annex II. A national plan may under no circumstances exempt an existing installation from the provisions laid down in Directive 96/61/EC.

2. A national plan shall include a list of the measures taken or to be taken to ensure that the aim specified in paragraph 1 will be achieved, including details of the proposed plan monitoring mechanism. It shall also include binding interim reduction targets against which progress towards the aim can be measured. It shall be compatible with the relevant existing Community legislation, including the relevant provisions of this Directive, and shall include:

— an identification of the activity or activities to which the plan applies,

— the reduction in emissions to be achieved by those activities which corresponds to that which would have been achieved by applying the emission limits as specified in paragraph 1,

— the number of installations affected by the plan and their total emissions and the total emission of each of the activities.

The plan shall also include a full description of the range of instruments through which its requirements will be achieved, evidence that these instruments will be enforceable and details of the means by which compliance with the plan will be demonstrated.

3. The Member State shall submit the plan to the Commission. The plan must be accompanied by supporting documentation sufficient to verify that the aim of paragraph 1 will be achieved, including any documentation specifically requested by the Commission. Existing installations undergoing a substantial change shall remain within the scope of the national plan, provided that they were part of this plan before undergoing such substantial change.

4. The Member State shall designate a national authority for the collection and evaluation of the information required by paragraph 3 and for the implementation of the national plan.

5. (a) The Commission shall inform the committee referred to in Article 13 of the criteria for assessing national plans, one year after the entry into force of this Directive at the latest.

(b) If the Commission, in considering the plan, the resubmitted plan, or in considering the progress reports submitted by the Member State under Article 11, is not satisfied that the objectives of the plan will be achieved within the prescribed period, it shall inform the Member State and the committee referred to in Article 13 of its opinion and of the reasons for reaching such an opinion. It shall do so within six months of receipt of the plan or report. The Member State shall then notify the Commission and inform the committee, within three months, of the corrective measures it will take in order to ensure that the objectives are achieved.

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6. If the Commission decides within six months of the notification of the corrective measures that those measures are insufficient to ensure that the objective of the plan is achieved within the prescribed period, the Member State shall be obliged to satisfy the requirements of Article 5(2) and (3) and Annex II within the period specified in this Directive in the case of existing installations. The Commission shall inform the committee referred to in Article 13 of its decision.

Article 7

Substitution

1. The Commission shall ensure that an exchange of information between Member States and the activities concerned on the use of organic substances and their potential substitutes takes place. It shall consider the questions of:

— fitness for use,

— potential effects on human health and occupational exposure in particular;

— potential effects on the environment, and

— the economic consequences, in particular, the costs and benefits of the options available,

with a view to providing guidance on the use of substances and techniques which have the least potential effects on air, water, soil, ecosystems and human health. Following the exchange of information, the Commission shall publish guidance for each activity.

2. Member States shall ensure that the guidance referred to in paragraph 1 is taken into account during authorisation and during the formulation of general binding rules.

Article 8

Monitoring

1. Member States shall introduce an obligation for the operator of an installation covered by this Directive to supply the competent authority once a year or on request with data that enables the competent authority to verify compliance with this Directive.

2. Member States shall ensure that channels to which abatement equipment is connected, and which at the final point of discharge emit more than an average of 10 kg/h of total organic carbon, are monitored continuously for compliance.

3. In the other cases, Member States shall ensure that either continuous or periodic measurements are carried out. For periodic measurements at least three readings shall be obtained during each measurement exercise.

4. Measurements are not required in the case where end-of-pipe abatement equipment is not needed to comply with this Directive.

5. The Commission shall organise an exchange of information on the use of solvent management plans in Member States based on the data for the implementation of this Directive in the three years following the date referred to in Article 15.

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Article 9

Compliance with emission limit values

1. Compliance with the following shall be demonstrated to the satisfaction of the competent authority:

— emission limit values in waste gases, fugitive emission values and total emission limit values,

— the requirements of the reduction scheme under Annex IIB,

— the provisions of Article 5(3).

Guidance is provided in Annex III on solvent management plans serving to demonstrate compliance with these parameters.

Gas volumes may be added to the waste gas for cooling or dilution purposes where technically justified but shall not be considered when determining the mass concentration of the pollutant in the waste gas.

2. Following a substantial change, compliance shall be reverified.

3. In the case of continuous measurements the emission limit values shall be considered to be complied with if:

(a) none of the averages over 24 hours of normal operation exceeds the emission limit values, and

(b) none of the hourly averages exceeds the emission limit values by more than a factor of 1,5.

4. In the case of periodic measurements the emission limit values shall be considered to be complied with if, in one monitoring exercise:

(a) the average of all the readings does not exceed the emission limit values, and

(b) none of the hourly averages exceeds the emission limit value by more than a factor of 1,5.

5. Compliance with the provisions of Article 5(7) and (8) shall be verified on the basis of the sum of the mass concentrations of the individual volatile organic compounds concerned. For all other cases, compliance shall be verified on the basis of the total mass of organic carbon emitted unless otherwise specified in Annex IIA.

Article 10

Non-compliance

Member States shall take appropriate measures to ensure that, if it is found that the requirements of this Directive have been breached:

(a) the operator informs the competent authority and takes measures to ensure that compliance is restored within the shortest possible time;

(b) in cases of non-compliance causing immediate danger to human health and as long as compliance is not restored under the conditions of paragraph (a), operation of the activity is suspended.

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Article 11

Information systems and reporting

1. At intervals of three years, Member States shall send information to the Commission on the implementation of this Directive in the form of a report. The report shall be drawn up on the basis of a questionnaire or outline drafted by the Commission in accordance with the procedure laid down in Article 6 of Directive 91/692/EEC ([1]). The questionnaire or outline shall be sent to the Member States six months before the start of the period covered by the report. The report shall be made to the Commission within nine months of the end of the three-year period covered by it. Member States shall publish the reports produced at the same time as they are transmitted to the Commission, subject to the restrictions laid down in Article 3(2) and (3) of Directive 90/313/EEC ([2]). The first report shall cover the period of the first three years after the date referred to in Article 15.

2. The information submitted under paragraph 1 shall, in particular, include sufficient representative data to demonstrate that the requirements of Article 5 and as the case may be, the requirements of Article 6 have been complied with.

3. The Commission shall draw up a report on the implementation of this Directive on the basis of the data provided by the Member States at the latest five years after the first reports are submitted by the Member States. The Commission shall submit this report to the European Parliament and the Council, accompanied by proposals if necessary.

Article 12

Public access to information

1. Without prejudice to Directive 90/313/EEC, Member States shall take the necessary measures to ensure that at least applications for authorisation for new installations or for substantial changes of those installations requiring a permit under Directive 96/61/EC are made available for an appropriate period of time to the public, to enable it to comment on them before the competent authority reaches a decision. Without prejudice to Directive 96/61/EC, no obligation to reformat the information for the public is implied.

The decision of the competent authority, including at least a copy of the authorisation, and any subsequent updates, must also be made available to the public.

The general binding rules applicable for installations and the list of registered and authorised activities shall be made available to the public.

2. The results of emission-monitoring as required under the authorisation or registration conditions referred to in Articles 8 and 9 and held by the competent authority must be made available to the public.

3. Paragraphs 1 and 2 shall apply, subject to the restrictions regarding grounds for refusal by public authorities to provide information, including commercial and industrial confidentiality, laid down in Article 3(2) and (3) of Directive 90/313/EEC.

([1]) OJ L 377, 31.12.1991, p. 48.
([2]) OJ L 158, 23.6.1990, p. 56.

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Article 13

1. The Commission shall be assisted by a committee.

2. Where reference is made to this Article, Articles 3 and 7 of Decision 1999/468/EC [1] shall apply, having regard to the provisions of Article 8 thereof.

3. The Committee shall adopt its rules of procedure.

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Article 14

Sanctions

Member States shall determine the sanctions applicable to breaches of the national provisions adopted pursuant to this Directive and shall take all necessary measures for their implementation. The sanctions determined must be effective, proportionate and dissuasive. Member States shall notify these provisions to the Commission at the latest by the date mentioned in Article 15, and shall notify any subsequent modification of them as soon as possible.

Article 15

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive ►C2 not later than 1 April 2001. ◄ They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 16

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

Article 17

Addressees

This Directive is addressed to the Member States.

[1] Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (OJ L 184, 17.7.1999, p. 23).

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ANNEX I

SCOPE

This Annex contains the categories of activity referred to in Article 1. When operated above the thresholds listed in Annex IIA, the activities mentioned in this Annex fall within the scope of the Directive. In each case the activity includes the cleaning of the equipment but not the cleaning of products unless specified otherwise.

Adhesive coating

— Any activity in which an adhesive is applied to a surface, with the exception of adhesive coating and laminating associated with printing activities.

Coating activity

— Any activity in which a single or multiple application of a continuous film of a coating is applied to:

  — vehicles as listed below:

    — new cars, defined as vehicles of category M1 in Directive 70/156/EEC ([1]), and of category N1 in so far as they are coated at the same installation as M1 vehicles,

    — truck cabins, defined as the housing for the driver, and all integrated housing for the technical equipment, of vehicles of categories N2 and N3 in Directive 70/156/EEC,

    — vans and trucks, defined as vehicles of categories N1, N2 and N3 in Directive 70/156/EEC, but not including truck cabins,

    — buses, defined as vehicles of categories M2 and M3 in Directive 70/156/EEC,

  — trailers, defined in categories O1, O2, O3 and O4 in Directive 70/156/EEC,

  — metallic and plastic surfaces including surfaces of airplanes, ships, trains, etc.,

  — wooden surfaces,

  — textile, fabric, film and paper surfaces,

  — leather.

  It does not include the coating of substrate with metals by electrophoretic and chemical spraying techniques. If the coating activity includes a step in which the same article is printed by whatever technique used, that printing step is considered part of the coating activity. However, printing activities operated as a separate activity are not included, but may be covered by the Directive if the printing activity falls within the scope thereof.

Coil coating

— Any activity where coiled steel, stainless steel, coated steel, copper alloys or aluminium strip is coated with either a film forming or laminate coating in a continuous process.

Dry cleaning

— Any industrial or commercial activity using VOCs in an installation to clean garments, furnishing and similar consumer goods with the exception of the manual removal of stains and spots in the textile and clothing industry.

Footwear manufacture

— Any activity of producing complete footwear or parts thereof.

([1]) OJ L 42, 23.2.1970, p. 1. Directive as last amended by Directive 97/27/EC (OJ L 233, 25.8.1997, p. 1).

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Manufacturing of coating ►M3 *mixtures* ◄*, varnishes, inks and adhesives*

— The manufacture of the above final products, and of intermediates where carried out at the same site, by mixing of pigments, resins and adhesive materials with organic solvent or other carrier, including dispersion and predispersion activities, viscosity and tint adjustments and operations for filling the final product into its container.

Manufacturing of pharmaceutical products

— The chemical synthesis, fermentation, extraction, formulation and finishing of pharmaceutical products and where carried out at the same site, the manufacture of intermediate products.

Printing

— Any reproduction activity of text and/or images in which, with the use of an image carrier, ink is transferred onto whatever type of surface. It includes associated varnishing, coating and laminating techniques. However, only the following sub-processes are subject to the Directive:

— *flexography* — a printing activity using an image carrier of rubber or elastic photopolymers on which the printing areas are above the non-printing areas, using liquid inks which dry through evaporation,

— *heatset web offset* — a web-fed printing activity using an image carrier in which the printing and non-printing area are in the same plane, where web-fed means that the material to be printed is fed to the machine from a reel as distinct from separate sheets. The non-printing area is treated to attract water and thus reject ink. The printing area is treated to receive and transmit ink to the surface to be printed. Evaporation takes place in an oven where hot air is used to heat the printed material,

— *laminating associated to a printing activity* — the adhering together of two or more flexible materials to produce laminates,

— *publication rotogravure* — a rotogravure printing activity used for printing paper for magazines, brochures, catalogues or similar products, using toluene-based inks,

— *rotogravure* — a printing activity using a cylindrical image carrier in which the printing area is below the non-printing area, using liquid inks which dry through evaporation. The recesses are filled with ink and the surplus is cleaned off the non-printing area before the surface to be printed contacts the cylinder and lifts the ink from the recesses,

— *rotary screen printing* — a web-fed printing activity in which the ink is passed onto the surface to be printed by forcing it through a porous image carrier, in which the printing area is open and the non-printing area is sealed off, using liquid inks which dry only through evaporation. Web-fed means that the material to be printed is fed to the machine from a reel as distinct from separate sheets,

— *varnishing* — an activity by which a varnish or an adhesive coating for the purpose of later sealing the packaging material is applied to a flexible material.

Rubber conversion

— Any activity of mixing, milling, blending, calendering, extrusion and vulcanisation of natural or synthetic rubber and any ancillary operations for converting natural or synthetic rubber into a finished product.

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Surface cleaning

— Any activity except dry cleaning using organic solvents to remove contamination from the surface of material including degreasing. A cleaning activity consisting of more than one step before or after any other activity shall be considered as one surface cleaning activity. This activity does not refer to the cleaning of the equipment but to the cleaning of the surface of products.

Vegetable oil and animal fat extraction and vegetable oil refining activities

— Any activity to extract vegetable oil from seeds and other vegetable matter, the processing of dry residues to produce animal feed, the purification of fats and vegetable oils derived from seeds, vegetable matter and/or animal matter.

Vehicle refinishing

— Any industrial or commercial coating activity and associated degreasing activities performing:

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— the original coating of road vehicles as defined in Directive 70/156/EEC or part of them with refinishing-type materials, where this is carried out away from the original manufacturing line, or

— the coating of trailers (including semi-trailers) (category O).

Winding wire coating

— Any coating activity of metallic conductors used for winding the coils in transformers and motors, etc.

Wood impregnation

— Any activity giving a loading of preservative in timber.

Wood and plastic lamination

— Any activity to adhere together wood and/or plastic to produce laminated products.

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ANNEX IIA

I. THRESHOLDS AND EMISSION CONTROLS

	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
1	Heatset web offset printing (> 15)	15—25 > 25	100 20	30 (1) 30 (1)				(1) Solvent residue in finished product is not to be considered as part of fugitive emissions.
2	Publication rotogravure (> 25)		75	10	15			
3	Other rotogravure, flexography, rotary screen printing, laminating or varnishing units (> 15) rotary screen printing on textile/cardboard (> 30)	15—25 > 25 > 30 (1)	100 100 100	25 20 20				(1) Threshold for rotary screen printing on textile and on cardboard.
4	Surface cleaning (1) (> 1)	1—5 > 5	20 (2) 20 (2)	15 10				(1) Using compounds specified in Article 5(6) and (8). (2) Limit refers to mass of compounds in mg/Nm^3, and not to total carbon.
5	Other surface cleaning (> 2)	2—10 > 10	75 (1) 75 (1)	20 (1) 15 (1)				(1) Installations which demonstrate to the competent authority that the average organic solvent content of all cleaning material used does not exceed 30 % by weight are exempt from application of these values.

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	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
6	Vehicle coating (< 15) and vehicle refinishing	> 0,5	50 ([1])	25				([1]) Compliance in accordance with Article 9(3) should be demonstrated based on 15 minute average measurements.
7	Coil coating (> 25)		50 ([1])	5	10			([1]) For installations which use techniques which allow reuse of recovered solvents, the emission limit shall be 150.
8	Other coating, including metal, plastic, textile ([5]), fabric, film and paper coating (> 5)	5—15 > 15	100 ([1]) ([4]) 50/75 ([2]) ([3]) ([4])	►C2 25 ([4]) ◄ 20 ([4])				([1]) Emission limit value applies to coating application and drying processes operated under contained conditions. ([2]) The first emission limit value applies to drying processes, the second to coating application processes. ([3]) For textile coating installations which use techniques which allow reuse of recovered solvents, the emission limit applied to coating application and drying processes taken together shall be 150. ([4]) Coating activities which cannot be applied under contained conditions (such as shipbuilding, aircraft painting) may be exempted from these values, in accordance with Article 5(3)(b). ([5]) Rotary screen printing on textile is covered by activity No 3.

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	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
9	Winding wire coating (> 5)					10 g/kg (1) 5 g/kg (2)		(1) Applies for installations where average diameter of wire ≤ 0,1 mm. (2) Applies for all other installations.
10	Coating of wooden surfaces (> 15)	15—25 > 25	100 (1) 50/75 (2)	25 20				(1) Emission limit applies to coating application and drying processes operated under contained conditions. (2) The first value applies to drying processes, the second to coating application processes.
11	Dry cleaning					20 g/kg (1) (2) (3)		(1) Expressed in mass of solvent emitted per kilogram of product cleaned and dried. (2) The emission limit in Article 5(8) does not apply for this sector. (3) The following exemption refers only to Greece: the total emission limit value does not apply, for a period of 12 years after the date on which this Directive is brought into effect, to existing installations located in remote areas and/or islands, with a population of no more than 2 000 permanent inhabitants where the use of advanced technology equipment is not economically feasible.
12	Wood impregnation (> 25)		100 (1)	45		11 kg/m^3		(1) Does not apply for impregnation with creosote.

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	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
13	Coating of leather (> 10)	10—25 > 25 > 10 (1)				85 g/m^2 75 g/m^2 150 g/m^2		Emission limits are expressed in grams of solvent emitted per m^2 of product produced. (1) For leather coating activities in furnishing and particular leather goods used as small consumer goods like bags, belts, wallets, etc.
14	Footwear manufacture (> 5)					25 g per pair		Total emission limit values are expressed in grams of solvent emitted per pair of complete footwear produced.
15	Wood and plastic lamination (> 5)					30 g/m^2		
16	Adhesive coating (> 5)	5—15 > 15	50 (1) 50 (1)	25 20				(1) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.
17	Manufacture of coating ►M3 mixtures ◄, varnishes, inks and adhesives (> 100)	100—1 000 > 1 000	150 150	5 3		5 % of solvent input 3 % of solvent input		The fugitive emission value does not include solvent sold as part of a coatings ►M3 mixture ◄ in a sealed container.

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	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
18	Rubber conversion (> 15)		20 ([1])	25 ([2])		25 % of solvent input		([1]) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150. ([2]) The fugitive emission value does not include solvent sold as part of products or ►M3 mixtures ◄ in a sealed container.
19	Vegetable oil and animal fat extraction and vegetable oil refining activities (> 10)					Animal fat: 1,5 kg/tonne Castor: 3 kg/tonne Rape seed: 1 kg/tonne Sunflower seed: 1 kg/tonne Soya beans (normal crush): 0,8 kg/tonne Soya beans (white flakes): 1,2 kg/tonne Other seeds and other vegetable matter: 3 kg/tonne ([1]) 1,5 kg/tonne ([2]) 4 kg/tonne ([3])		([1]) Total emission limit values for installations processing individual batches of seeds and other vegetable matter should be set by the competent authority on a case-by-case basis, applying the best available techniques. ([2]) Applies to all fractionation processes excluding de-gumming (the removal of gums from the oil). ([3]) Applies to de-gumming.

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	Activity (solvent consumption threshold in tonnes/year)	Threshold (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm^3)	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
20	Manufacturing of pharmaceutical products (> 50)		20 ([1])	5 ([2])	15 ([2])	5 % of solvent input	15 % of solvent input	([1]) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150. ([2]) The fugitive emission limit value does not include solvent sold as part of products or ►M3 mixtures ◄ in a sealed container.

▼B

II. THE VEHICLE COATING INDUSTRY

The total emission limit values are expressed in terms of grams of solvent emitted in relation to the surface area of product in square metres and in kilograms of solvent emitted in relation to the car body.

The surface area of any product dealt with in the table below is defined as follows:

— the surface area calculated from the total electrophoretic coating area, and the surface area of any parts that might be added in successive phases of the coating process which are coated with the same coatings as those used for the product in question, or the total surface area of the product coated in the installation.

The surface of the electrophoretic coating area is calculated using the formula:

$$\frac{2 \times \text{total weight of product shell}}{\text{average thickness of metal sheet} \times \text{density of metal sheet}}$$

This method shall also be applied for other coated parts made out of sheets.

Computer aided design or other equivalent methods shall be used to calculate the surface area of the other parts added, or the total surface area coated in the installation.

The total emission limit value in the table below refers to all process stages carried out at the same installation from electrophoretic coating, or any other kind of coating process, through to the final wax and polish of topcoating inclusive, as well as solvent used in cleaning of process equipment, including spray booths and other fixed equipment, both during and outside of production time. The total emission limit value is expressed as the mass sum of organic compounds per m^2 of the total surface area of coated product and as the mass sum of organic compounds per car body.

Activity (solvent consumption threshold in tonnes/year)	Production threshold (refers to annual production of coated item)	Total emission limit value	
		New	Existing
Coating of new cars (> 15)	> 5 000	45 g/m^2 or 1,3 kg/body + 33 g/m^2	60 g/m^2 or 1,9 kg/body + 41 g/m^2
	≤ 5 000 monocoque or > 3 500 chassis-built	90 g/m^2 or 1,5 kg/body + 70 g/m^2	90 g/m^2 or 1,5 kg/body + 70 g/m^2
		Total emission limit (g/m^2)	
Coating of new truck cabins (> 15)	≤ 5 000	65	85
	> 5 000	55	75
Coating of new vans and trucks (> 15)	≤ 2 500	90	120
	> 2 500	70	90
Coating of new buses (> 15)	≤ 2 000	210	290
	> 2 000	150	225

Vehicle coating installations below the solvent consumption thresholds in the table above shall meet the requirements for the vehicle refinishing sector in Annex IIA.

▼B

ANNEX IIB

REDUCTION SCHEME

1. **Principles**

The purpose of the reduction scheme is to allow the operator the possibility to achieve by other means emission reductions, equivalent to those achieved if the emission limit values were to be applied. To that end the operator may use any reduction scheme, specially designed for his installation, provided that in the end an equivalent emission reduction is achieved. Member States shall report according to Article 11 of the Directive to the Commission about the progress in achieving the same emission reduction, including the experience from the application of the reduction scheme.

2. **Practice**

In the case of applying coatings, varnishes, adhesives or inks, the following scheme can be used. Where the following method is inappropriate the competent authority may allow an operator to apply any alternative exemption scheme which it is satisfied fulfils the principles outlined here. The design of the scheme takes into account the following facts:

(i) where substitutes containing little or no solvent are still under development, a time extension must be given to the operator to implement his emission reduction plans;

(ii) the reference point for emission reductions should correspond as closely as possible to the emissions which would have resulted had no reduction action been taken.

The following scheme shall operate for installations for which a constant solid content of product can be assumed and used to define the reference point for emission reductions:

(i) the operator shall forward an emission reduction plan which includes in particular decreases in the average solvent content of the total input and/or increased efficiency in the use of solids to achieve a reduction of the total emissions from the installation to a given percentage of the annual reference emissions, termed the target emission. This must be done on the following time frame:

Time period		Maximum allowed total annual emissions
New installations	Existing installations	
By 31.10.2001	By 31.10.2005	Target emission × 1,5
By 31.10.2004	By 31.10.2007	Target emission

(ii) The annual reference emission is calculated as follows:

(a) The total mass of solids in the quantity of coating and/or ink, varnish or adhesive consumed in a year is determined. Solids are all materials in coatings, inks, varnishes and adhesives that become solid once the water or the volatile organic compounds are evaporated.

(b) The annual reference emissions are calculated by multiplying the mass determined in (a) by the appropriate factor listed in the table below. Competent authorities may adjust these factors for individual installations to reflect documented increased efficiency in the use of solids.

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Activity	Multiplication factor for use in item (ii)(b)
Rotogravure printing; flexography printing; laminating as part of a printing activity; varnishing as part of a printing activity; wood coating; coating of textiles, fabric film or paper; adhesive coating	4
Coil coating, vehicle refinishing	3
Food contact coating, aerospace coatings	2,33
Other coatings and rotary screen printing	1,5

(c) The target emission is equal to the annual reference emission multiplied by a percentage equal to:

— (the fugitive emission value + 15), for installations falling within item 6 and the lower threshold band of items 8 and 10 of Annex IIA,

— (the fugitive emission value + 5) for all other installations.

(d) Compliance is achieved if the actual solvent emission determined from the solvent management plan is less than or equal to the target emission.

▼B

ANNEX III

SOLVENT MANAGEMENT PLAN

1. **Introduction**

This Annex provides guidance on carrying out a solvent management plan. It identifies the principles to be applied (item 2) and provides a framework for the mass balance (item 3) and an indication of the requirements for verification of compliance (item 4).

2. **Principles**

The solvent management plan serves the following purposes:

(i) verification of compliance as specified in Article 9(1);

(ii) identification of future reduction options;

(iii) enabling of the provision of information on solvent consumption, solvent emissions and compliance with the Directive to the public.

3. **Definitions**

The following definitions provide a framework for the mass balance exercise.

Inputs of organic solvents (I):

I1 The quantity of organic solvents or their quantity in ►M3 mixtures ◄ purchased which are used as input into the process in the time frame over which the mass balance is being calculated.

I2 The quantity of organic solvents or their quantity in ►M3 mixtures ◄ recovered and reused as solvent input into the process. (The recycled solvent is counted every time it is used to carry out the activity.)

Outputs of organic solvents (O):

O1 Emissions in waste gases.

O2 Organic solvents lost in water, if appropriate taking into account waste water treatment when calculating O5.

O3 The quantity of organic solvents which remains as contamination or residue in products output from the process.

O4 Uncaptured emissions of organic solvents to air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.

O5 Organic solvents and/or organic compounds lost due to chemical or physical reactions (including for example those which are destroyed, e.g. by incineration or other waste gas or waste water treatments, or captured, e.g. by adsorption, as long as they are not counted under O6, O7 or O8).

O6 Organic solvents contained in collected waste.

O7 Organic solvents, or organic solvents contained in ►M3 mixtures ◄, which are sold or are intended to be sold as a commercially valuable product.

O8 Organic solvents contained in ►M3 mixtures ◄ recovered for reuse but not as input into the process, as long as not counted under O7.

O9 Organic solvents released in other ways.

▼B

4. **Guidance on use of the solvent management plan for verification of compliance**

The use made of the solvent management plan will be determined by the particular requirement which is to be verified, as follows:

(i) Verification of compliance with the reduction option in Annex IIB, with a total emission limit value expressed in solvent emissions per unit product, or otherwise stated in Annex IIA.

(a) For all activities using Annex IIB the solvent management plan should be done annually to determine consumption (C). Consumption can be calculated according to the following equation:

$$C = I1 - O8$$

A parallel exercise should also be undertaken to determine solids used in coating in order to derive the annual reference emission and the target emission each year.

(b) For assessing compliance with a total emission limit value expressed in solvent emissions per unit product or otherwise stated in Annex IIA, the solvent management plan should be done annually to determine emissions (E). Emissions can be calculated according to the following equation:

$$E = F + O1$$

where F is the fugitive emission as defined in section (ii)(a). The emission figure should then be divided by the relevant product parameter.

(c) For assessing compliance with the requirements of Article 5(5)(b)(ii), the solvent management plan should be done annually to determine total emissions from all activities concerned, and that figure should then be compared with the total emissions that would have resulted had the requirements of Annex II been met for each activity separately.

(ii) Determination of fugitive emissions for comparison with fugitive emission values in Annex IIA:

(a) *Methodology*

The fugitive emission can be calculated according to the following equation:

$$F = I1 - O1 - O5 - O6 - O7 - O8$$

or

$$F = O2 + O3 + O4 + O9$$

This quantity can be determined by direct measurement of the quantities. Alternatively, an equivalent calculation can be made by other means, for instance by using the capture efficiency of the process.

The fugitive emission value is expressed as a proportion of the input, which can be calculated according to the following equation:

$$I = I1 + I2$$

(b) *Frequency*

Determination of fugitive emissions can be done by a short but comprehensive set of measurements. It need not be done again until the equipment is modified.

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DIRECTIVE 92/112/EEC

of 15 December 1992

on procedures for harmonizing the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100a thereof,

Having regard to the proposal from the Commission (1),

In cooperation with the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas Council Directive 89/428/EEC of 21 June 1989 on procedures for harmonizing the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry (4) was annulled by the Court of Justice in its judgment of 11 June 1991 on the grounds that it lacked an appropriate legal basis (5);

Whereas, if Member States have taken the necessary measures to comply with the said Directive, it is not necessary for them to adopt new measures to meet this Directive, provided the measures already taken comply with the latter;

Whereas the legal void caused by the annulment of the said Directive may have adverse effects on the environment and on conditions of competition in the titanium dioxide production sector; whereas it is necessary to restore the material situation created by the said Directive;

Whereas the objective of this Directive is to approximate national rules relating to titanium dioxide production conditions in order to eliminate the existing distortions of competition between the various producers in the industry and to ensure a high level of environmental protection;

Whereas Council Directive 78/176/EEC of 20 February 1978 on waste from the titanium dioxide industry (6), and in particular Article 9 thereof, requires the Member States to draw up programmes for the progressive reduction and eventual elimination of pollution caused by waste from industrial establishments in existence on 20 February 1978;

Whereas these programmes set general targets for the reduction of pollution caused by liquid, solid and gaseous wastes to be achieved by 1 July 1987; whereas these programmes were to be submitted to the Commission so that it could present suitable proposals to the Council for their harmonization with regard to the reduction and eventual elimination of this pollution and the improvement of the conditions of competition in the titanium dioxide industry;

Whereas, in order to protect the aquatic environment, dumping of waste and discharges of certain wastes, in particular of solid and strong acid wastes, should be prohibited and discharges of other wastes, in particular of weak acid and neutralized wastes, should be progressively reduced;

Whereas existing industrial establishments should employ the appropriate systems for treating the wastes in order to meet the requisite targets by the set dates;

Whereas installation of those systems can give rise to major technico-economic difficulties in the case of weak acid waste and neutralized waste from certain establishments; whereas Member States should therefore be

(1) OJ No C 317, 7. 12. 1991, p. 5.
(2) OJ No C 94, 13. 4. 1992, p. 158, and OJ No C 305, 23. 11. 1992.
(3) OJ No C 98, 21. 4. 1992, p. 9.
(4) OJ No L 201, 14. 7. 1989, p. 56.
(5) Judgment of 11 June 1991, Case C-300/89, Commission v. Council (not yet published).
(6) OJ No L 54, 25. 2. 1978, p. 19; Directive as last amended by Directive 83/29(EEC (OJ No L 32, 3. 2. 1983, p. 28).

able to defer application of these provisions, on condition that a programme of effective reduction of pollution is drawn up and submitted to the Commission; whereas where Member States experience such difficulties, the Commission should be able to extend the relevant time limits;

Whereas, in respect of discharges of certain wastes, Member States should be able to make use of quality objectives in such a way that the results are equivalent in all respects to those obtained through limit values; whereas such equivalence should be demonstrated in a programme to be presented to the Commission;

Whereas, without prejudice to the obligations placed on Member States by Council Directive 80/779/EEC of 15 July 1980 on air quality limit values and guide values for sulphur dioxide and suspended particulates [1], and Council Directive 84/360/EEC of 28 June 1984 on the combating of air pollution from industrial plants [2], it is expedient to protect the quality of the air by fixing appropriate emission standards in respect of gaseous discharges from the titanium dioxide industry;

Whereas, in order to verify the effective application of the measures, Member States should undertake monitoring in relation to the actual production of each establishment;

Whereas all waste from the titanium dioxide industry should be avoided or reused where technically and economically feasible and whereas such waste should be reused or disposed of without endangering human health or the environment,

HAS ADOPTED THIS DIRECTIVE:

Article 1

This Directive lays down, as required by Article 9 (3) of Directive 78/176/EEC, procedures for harmonizing the programmes for the reduction and eventual elimination of pollution from existing industrial establishments and is intended to improve the conditions of competition in the titanium dioxide industry.

Article 2

1. For the purposes of this Directive:

(a) where the sulphate process is used:

— *solid waste* shall mean:

— insoluble ore residues not broken down by sulphuric acid during the manufacturing proces,

— copperas, i. e. crystalline ferrous sulphate ($F_eSO_47H_2O$),

— *strong acid waste* shall mean:

— the mother liquors arising from the filtration phase following hydrolysis of the titanyl sulphate solution. If these mother liquors are associated with weak acid wastes which overall contain more than 0,5 % free sulphuric acid and various heavy metals [3], the liquors and waste taken together shall be considered strong acid waste,

— *treatment waste* shall mean:

— filtration salts, sludges and liquid waste arising from the treatment (concentration or neutralization) of strong acid waste and containing various heavy metals, but not including neutralized and filtered or decanted waste containing only traces of heavy metals and which, before any dilution, has a pH value above 5,5,

— *weak acid waste* shall mean:

— wash waters, cooling waters, condensates and other sludges and liquid wastes, other than those included in the above definitions, containing 0,5 % or less free sulphuric acid,

— *neutralized waste* shall mean:

— any liquid which has a pH value over 5,5, contains only traces of heavy metals, and is obtained directly by filtration or decantation from strong or weak acid waste after its treatment to reduce its acidity and its heavy metal content,

— *dust* shall mean:

— all kinds of dust from production plants and in particular ore and pigment dust,

(1) OJ No L 229, 30. 8. 1980, p. 30; Directive as last amended by Directive 89/427/EEC (OJ No L 201, 14. 7. 1989, p. 53).

(2) OJ No L 188, 16. 7. 1989, p. 20.

(3) Strong acid waste which has been diluted until it contains 0,5 % or less free sulphuric acid shall also be covered by this difinition.

— SO_x shall mean:

— gaseous sulphur dioxide and trioxide released in the various stages of the manufacturing and internal waste treatment processes, including acid droplets;

(b) where the chlorine process is used:

— *solid waste* shall mean:

— insoluble ore residues not broken down by the chlorine during the manufacturing process,

— metal chlorides and metal hydroxides (filtration substances), arising in solid form from the manufacture of titanium tetrachloride,

— coke residues arising from the manufacture of titanium tetrachloride,

— *strong acid waste* shall mean:

— waste containing more than 0,5 % free hydrochloric acid and various heavy metals (1);

— *treatment waste* shall mean:

— filtration salts, sludges and liquid waste arising from the treatment (concentration or neutralization) of strong acid waste and containing various heavy metals, but not including neutralized and filtered or decanted waste containing only traces of heavy metals and which, before any dilution, has a pH value over 5,5,

— *weak acid waste* shall mean:

— wash waters, cooling waters, condensates and other sludges and liquid wastes, other than those included in the above definitions, containing 0,5 % or less free hydrochloric acid,

— *neutralized waste* shall mean:

— any liquid which has a pH value over 5,5, contains only traces of heavy metals, and is obtained directly by filtration or decantation from strong or weak acid waste after its treatment to reduce its acidity and its heavy metal content,

— *dust* shall mean:

— all kinds of dust from production plants and in particular ore, pigment and coke dust,

— *chlorine* shall mean:

— gaseous chlorine released in the various stages of the manufacturing process;

(c) where the sulphate process or the chlorine process is used

— *dumping* shall mean:

— any deliberate disposal into inland surface waters, internal coastal waters, territorial waters or the high seas of substances and materials by or from ships or aircraft (2)

2. The terms defined in Directive 78/176/EEC shall have the same meaning for the purposes of this Directive.

Article 3

The dumping of any solid waste, strong acid waste, treatment waste, weak acid waste, or neutralized waste, as referred to in Article 2 shall be prohibited with effect from 15 June 1993.

Article 4

Member States shall take the necessary measures to ensure that discharges of waste into inland surface waters, internal coastal waters, territorial waters and the high sea are prohibited:

(a) as regards solid waste, strong acid waste and treatment waste from existing industrial establishments using the sulphate process:

— by 15 June 1993 in all the abovementioned waters;

(b) as regards solid waste and strong acid waste from existing industrial establishments using the chlorine process:

— by 15 June 1993 in all the abovementioned waters.

Article 5

In the case of Member States which have serious technical and economic difficulties in complying with the date of application referred to in Article 4, the Commission may grant an extension, provided that a programme for the effective reduction of discharges of such waste is submitted to the Commission by 15 June 1993. That programme must result in a definitive ban on such discharges by 30 June 1993.

(1) Strong acid waste which has been diluted until it contains 0,5 % or less free sulphuric acid shall also be covered by this definition.

(2) *'Ships and aircraft'* shall mean waterborne vessels and airborne craft of any type whatsoever. This expression shall include air-cushion craft, floating craft, whether self-propelled or not, and fixed or floating platforms.

No later than three months after adoption of this Directive, the Commission shall be informed of any such cases and shall be consulted thereon. The Commission shall inform the other Member States.

Article 6

Member States shall take the necessary measures to ensure that discharges of waste are reduced in accordance with the following provisions:

(a) from existing industrial establishments using the sulphate process:

— weak acid waste and neutralized waste shall be reduced by 31 December 1993 in all waters to a value of not more than 800 kg of total sulphate per tonne of titanium dioxide produced (i. e. corresponding to the SO_4 ions contained in the free sulphuric acid and in the metallic sulphates);

(b) from existing industrial establishments using the chlorine process:

— weak acid waste, treatment waste and neutralized waste shall be reduced by 15 June 1993 in all waters to the following values of total chloride per tonne of titanium dioxide produced (i. e. corresponding to the C1 ions contained in the free hydrochloric acid and in the metallic chlorides):

— 130 kg using neutral rutile,

— 228 kg using synthetic rutile,

— 450 kg using slag.

In the case of an establishment using more than one type or ore, the values shall apply in proportion to the quantity of these ores used.

Article 7

Except where inland surface waters are concerned, Member States may defer the date of application referred to in point (a) of Article 6 until 31 December 1994 at the latest if serious technico-economic difficulties so require and provided that a programme of effective reduction of discharges of such waste is submitted to the Commission by 15 June 1993. Such a programme shall enable the following limit value per tonne of titanium dioxide produced to be reached by the date shown:

— weak acid waste and neutralized waste: 1 200 kg — 15 June 1993,

— weak acid waste and neutralized waste: 800 kg — 31 December 1994.

Three months at the latest following adoption of this Directive the Commission shall be informed of such cases, which shall be the subject of consultation with the Commission. The Commission shall inform the other Member States.

Article 8

1. As regards the requirements of Article 6, Member States may choose to make use of quality objectives coupled with appropriate limit values applied in such a way that the effects in terms of protecting the environment and avoiding distortions of competition are equivalent to that of the limit values laid down in this Directive.

2. If a Member State chooses to make use of quality objectives, it shall present to the Commission a programme (1) demonstrating that the measures achieve an effect which, in terms of protecting the environment and avoiding distortion of competition, is equivalent to that of the limit values by the dates when these limit values are applied in accordance with Article 6.

This programme shall be submitted to the Commission at least six months before the Member State proposes to apply the quality objectives.

This programme shall be assessed by the Commission in accordance with the procedures laid down in Article 10 of Directive 78/176/EEC.

The Commission shall inform the other Member States.

Article 9

1. Member States shall take the necessary measures to ensure that discharges into the atmosphere are reduced in accordance with the following provisions:

(a) in the case of existing industrial establishments using the sulphate process:

(i) as regards dust, discharges shall be reduced by 31 December 1993 to a value of not more than 50 mg/nm^3 (2) from major sources and not more than 150 mg/nm^3 (2) from any other source (3);

(ii) as regards SO_x, discharges arising from digestion and calcination steps in the manufacture of titanium dioxide shall be reduced by 1 January 1995 to a value of not more than 10 kg of SO_2 equivalent per tonne of titanium dioxide produced;

(1) Such information shall be provided under Article 14 of Directive 78/176/EEC or separately should circumstances so require.

(2) Cubic metre at a temperature of 273 K and a pressure of 101,3 kPa.

(3) Member States shall inform the Commission of those minor sources not included in their measurements.

(iii) Member States shall require means to be installed for preventing the emission of acid droplets;

(iv) plants for the concentration of waste acid shall not discharge more than 500 mg/nm^3 SO_x calculated as SO_2 equivalent (1);

(v) plants for the roasting of salts generated by the treatment of waste shall be equipped with the best available technology not entailing excessive costs in order to reduce SO_x emissions;

(b) in the case of existing industrial establishments using the chlorine process:

(i) as regards dust, discharges shall be reduced by 15 June 1993 to a value of not more than 50 mg/nm^3 (2) for major sources and not more than 150 mg/nm^3 (2) from any other source (3);

(ii) as regards chlorine, discharges shall be reduced by 15 June 1993 to a daily average concentration of not more than 5 mg/nm^3 (4) and not more than 40 mg/ng^3 at any time.

2. This Directive shall not prejudice Directive 80/779/EEC.

3. The procedure for monitoring the reference measurements for discharges of SO_x into the atmosphere is set out in the Annex.

Article 10

Member States shall monitor the values and reductions specified in Articles 6, 8 and 9 in relation to the actual production of each establishment.

Article 11

Member States shall take the measures necessary to ensure that all waste from the titanium dioxide industry, and in particular waste subject to prohibition on discharge or dumping into water or on discharge into the atmosphere is:

— avoided or reused where technically and economically feasible,

— reused or disposed of without endangering human health or harming the environment.

The same shall apply to waste arising from the reuse or treatment of the abovementioned waste.

Article 12

1. Member States which have not yet taken the necessary measures to comply with this Directive shall bring them into force not later than 15 June 1993. They shall inform the Commission forthwith of the national provisions adopted to comply with this Directive.

When Member States adopt these provisions, they shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.

2. Member States shall communicate to the Commission the provisions of national law which they adopt in the field governed by this Directive.

Article 13

This Directive is addressed to the Member States.

Done at Brussels, 15 December 1992.

For the Council

The President

M. HOWARD

(1) For new concentration processes the Commission can agree to a different value if the Member States can demonstrate the non-availability of techniques to achieve this standard.

(2) Cubic meter at a temperature of 273 K and a pressure of 101,3 kPa.

(3) Member States shall inform the Commission of those minor sources not included in their measurements.

(4) It is considered that these values correspond to a maximum of six grammes per tonne of titanium dioxide produced.

ANNEX

Procedure for monitoring the reference measurements for gaseous SO_x emissions

For the purposes of calculating the quantities of SO_2 and SO_3 and acid droplets expressed as SO_2 equivalent, discharged by specific installations, account must be taken of the volume of gas discharged over the duration of the specific operations in question and of the average SO_2/SO_3 content measured over the same period. The SO_2/SO_3 flow rate and content must be determined under the same temperature and humidity conditions.

►**B**

COUNCIL DIRECTIVE

of 3 December 1982

on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry

(82/883/EEC)

(OJ L 378, 31.12.1982, p. 1)

Amended by:

		Official Journal		
		No	page	date
►**M1**	Council Regulation (EC) No 807/2003 of 14 April 2003	L 122	36	16.5.2003
►**M2**	Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009	L 87	109	31.3.2009

Amended by:

►**A1**	Act of Accession of Spain and Portugal	L 302	23	15.11.1985
►**A2**	Act of Accession of Austria, Sweden and Finland	C 241	21	29.8.1994
	(adapted by Council Decision 95/1/EC, Euratom, ECSC)	L 1	1	1.1.1995

▼B

COUNCIL DIRECTIVE

of 3 December 1982

on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry

(82/883/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to Council Directive 78/176/EEC of 20 February 1978 on waste from the titanium dioxide industry ([1]), and in particular Article 7 (3) thereof,

Having regard to the proposal from the Commission ([2]),

Having regard to the opinion of the European Parliament ([3]),

Having regard to the opinion of the Economic and Social Committee ([4]),

Whereas, irrespective of the method and extent of the treatment of wastes from the titanium dioxide industry, the discharge, dumping, storage on, tipping on or injection into the ground of such wastes must be accompanied by measures for the surveillance and monitoring of the environments concerned from a physical, chemical, biological and ecological point of view;

Whereas, in order to monitor the quality of these environments, samples should be taken with a minimum frequency so that the parameters specified in the Annexes may be measured; whereas the number of these sampling operations could be reduced in the light of the results obtained; whereas, to ensure that the monitoring is effective, samples should also be taken if possible in a zone deemed to be unaffected by the discharges in question;

Whereas, in connection with the analyses carried out by the Member States, common reference methods of measurement should be fixed for determining the parametric values which define the physical, chemical, biological and ecological characteristics of the environments concerned;

Whereas, for the surveillance and monitoring of the environments affected, Member States may at any time lay down other parameters in addition to those laid down by this Directive;

Whereas it is necessary to define the details of the methods of surveillance and monitoring which Member States communicate to the Commission; whereas the Commission shall, with the prior agreement of the Member States, publish a consolidated report on these details;

Whereas in certain natural circumstances it may prove difficult to carry out the surveillance and monitoring operations, and, accordingly, provision must be made for derogation, in certain cases, from this Directive;

Whereas technical and scientific progress may require the rapid adjustment of certain of the provisions contained in the Annex; whereas to facilitate implementation of the requisite measures a procedure should be laid down to establish close cooperation between the Member States and the Commission through a committee on adaptation to scientific and technical progress,

HAS ADOPTED THIS DIRECTIVE:

([1]) OJ No L 54, 25.2.1978, p. 19.
([2]) OJ No C 356, 31.12.1980, p. 32 and OJ No C 187, 22.7.1982, p. 10.
([3]) OJ No C 149, 14.6.1982, p. 101.
([4]) OJ No C 230, 10.9.1981, p. 5.

▼B

Article 1

This Directive lays down, pursuant to Article 7 (3) of Directive 78/176/EEC, the procedures for the surveillance and monitoring of the effects on the environment, having regard to its physical, chemical, biological and ecological aspects, of the discharge, dumping, storage on, tipping on or injection into the ground of waste from the titanium dioxide industry.

Article 2

For the purpose of this Directive:

— 'environments affected' means the water, the land surface and underground strata and the air in or into which waste from the titanium dioxide industry is discharged, dumped, stored, tipped or injected,

— 'sampling point' means the point at which samples are taken.

Article 3

1. The parameters applicable for the surveillance and monitoring referred to in Article 1 are specified in the Annexes.

2. Where a parameter appears in the 'mandatory determination' column in the Annexes, sampling and analysis of the samples must be carried out in respect of the environmental components indicated.

3. Where a parameter appears in the 'optional determination' column in the Annexes, the Member States shall, if they consider it necessary, have the sampling and analysis of samples carried out for the environmental components indicated.

Article 4

1. Member States shall carry out surveillance and monitoring of the environments affected and of a neighbouring zone deemed to be unaffected, special account being taken of local environmental factors and the manner of disposal, i.e. whether intermittent or continuous.

2. Except where otherwise specified in the Annexes, Member States shall determine on a case-by-case basis the exact sites from which samples are to be taken, the distance of these sites from the nearest pollutant disposal point and the depth or height at which the samples must be taken.

The samples must be taken at the same location and depth and under the same conditions in the course of successive sampling operations, for example in the case of tidal waters, at the same time in relation to high tide, tidal coefficient.

3. For the monitoring and inspection of the environments affected, Member States shall determine the frequency of sampling and analysis for each parameter listed in the Annexes.

For parameters where determination is mandatory, the frequency of sampling and analysis must not be less than the minimum frequencies indicated in the Annexes. However, once the behaviour, fate and effects of the waste have, as far as possible, been established, and provided there is no significant deterioration in the quality of the environment, Member States may provide for a frequency of sampling and analysis below these frequencies. Should there subsequently be any significant deterioration in the quality of the environment as a result of the waste or of any change in the disposal operation, the Member State shall revert to sampling and analysis at a frequency not less than that specified in the Annexes. If a Member State considers it necessary or advisable, it may distinguish between different parameters, applying this subpar-

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agraph to those parameters where no significant deterioration in the quality of the environment has been recorded.

4. For the monitoring and inspection of an appropriate neighbouring zone deemed to be unaffected, the laying down of the frequency of sampling and analysis shall be assessed by the Member States. When a Member State finds that it is not possible to identify such a neighbouring zone, it shall inform the Commission to that effect.

Article 5

1. The reference methods of measurement for determining the parametric values are specified in the Annexes. Laboratories using other methods must ensure that the results obtained are comparable.

2. The containers used to carry the samples, the agents or methods used to preserve a part sample with a view to analysis of one or more parameters, the transport and storage of samples and their preparation for analysis must be such that they do not significantly affect the analytical results.

Article 6

For the surveillance and monitoring of the environments affected, Member States may, at any time, lay down other parameters in addition to those laid down by this Directive.

Article 7

1. The report which the Member States are required to forward to the Commission pursuant to Article 14 of Directive 78/176/EEC shall contain details of the surveillance and monitoring operations carried out by the bodies appointed in accordance with Article 7 (2) of that Directive. These details shall, in respect of each environment affected, include the following information:

— a description of the sampling point, including its permanent features, which may be coded, and other administrative and geographical information. This information shall be provided only once when the sampling point is designated,

— a description of the sampling methods used,

— the results of the measurements of the parameters whose determination is mandatory and, where Member States consider it useful, also those of parameters whose determination is optional,

— the methods of measurement and analysis used and, where appropriate, their limit of detection, accuracy and precision,

— changes, adopted in accordance with Article 4 (3), in the frequency of sampling and analysis.

2. The first set of data to be communicated pursuant to paragraph 1 shall be that gathered during the third year following notification of this Directive.

3. The Commission shall, with the prior agreement of the Member State concerned, publish a summary of the information supplied to it.

4. The Commission shall assess the effectiveness of the procedure for the surveillance and monitoring of the environments affected and shall — no later than six years after notification of this Directive — place before the Council, if appropriate, proposals to improve this procedure and, if necessary, to harmonize the methods of measurement including their limit of detection, accuracy and precision and the sampling methods.

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Article 8

Member States may derogate from this Directive in the event of flooding or natural disaster or on account of exceptional weather conditions.

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Article 9

The Commission shall adopt the requisite amendments to adapt to scientific and technical progress the contents of the Annexes as regards parameters listed in the 'optional determination' column and reference methods of measurement.

Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 11(2).

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Article 10

1. A committee on adaptation to technical progress (hereinafter referred to as 'the committee'), consisting of representatives of the Member States and chaired by a Commission representative, is hereby set up.

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Article 11

1. The Commission shall be assisted by the committee.

2. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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Article 12

Point (c) of Article 8 (1) of Directive 78/176/EEC is hereby replaced by the following:

'(c) if the results of the monitoring which the Member States are obliged to carry out on the environment concerned reveal a deterioration in the area under consideration, or'.

Article 13

Where waste elimination requires that, in accordance with Article 4 (1) of Directive 78/176/EEC, the competent authorities of more than one Member State should issue prior authorizations, the Member States involved shall consult each other on the content and the implementation of the monitoring programme.

Article 14

1. The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years following its notification. They shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field governed by this Directive.

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Article 15

This Directive is addressed to the Member States.

ANNEX I

METHOD OF WASTE DISPOSAL: DISCHARGE INTO AIR

Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Comments
	mandatorily	optionally		
Air	Sulphur dioxide (SO_2) (1) Chlorine (2)	Dust	Continuously	1. Region with surveillance by an existing air pollution surveillance network with at least one station near the production site giving representative readings for pollution emanating from the site
			12 (3)	2. Region with no surveillance network. Measurement of total amounts of gaseous discharges emitted by the production site. Where a site has a number of discharge sources, sequential measurements may be made. The reference method of measurement for sulphur dioxide is that given in Annex III to Council Directive 80/779/EEC of 15 July 1980 on air quality limit values and guide values for sulphur dioxide and suspended particulates (OJ No L 229, 30.8.1980, p. 30)

(1) If the production process used is the sulphate process.
(2) To be used once measuring technology allows continuous measurements to be carried out and where the chlorine process is used.
(3) The figures must be sufficiently representative and significant.

ANNEX II

METHOD OF WASTE DISPOSAL: DISCHARGE INTO OR IMMERSION IN SALT WATER

(estuarine, coastal, open sea)

Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of measurement
	mandatorily	optionally		
Water column Non-filtered sea water (1)	Temperature (°C)		3	Thermometry. Measurement is to be carried out on the spot at the time of sampling
	Salinity (‰)		3	Conductimetry
	pH (pH unit)		3	Electrometry. Measurement is to be carried out on the spot at the time of sampling
	Dissolved O_2 (mg/O_2 dissolved/l)		3	— Winkler method — Electrochemical method
	Turbidity (mg solids/l) or suspended matter (mg/l)		3	For turbidity: turbidimetry For suspended matter: gravimetry — Weighing after filtration through 0·45 μm pore size membrane filter and drying at 105 °C — Weighing after centrifugation (minimum time five minutes, average acceleration 2 800 to 3 200 g) and drying at 105° C
	Fe (dissolved and in suspension) (mg/l)		3	After the sample has been appropriately prepared, determination by atomic absorption spectrophotometry or by molecular absorption spectrophotometry
		Cr, total Cd, total Hg (mg/l)	3	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry

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Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of measurement
	mandatorily	optionally		
	Ti (mg/l)	V, Mn, Ni, Zn (mg/l)	3	Atomic absorption spectrophotometry
		Cu, Pb (mg/l)	3	— Atomic absorption spectrophotometry — Polarography
Sea water filtered through 0·45 µm pore size membrane filter ([1])	Dissolved Fe (mg/l)		3	Determination by atomic absorption spectrophotometry or by molecular absorption spectrophotometry
		Cr, Cd, Hg (mg/l)	3	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry
		Ti, V, Mn, Ni, Zn (mg/l)	3	Atomic absorption spectrophotometry
		Cu, Pb (mg/l)	3	— Atomic absorption spectrophotometry — Polarography
Suspended solids remaining in 0·45 µm pore size membrane filter	Total Fe (mg/l)	Cr, Cd, Hg (mg/l)	3	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry
		Ti, V, Mn, Ni, Zn (mg/l)	3	Atomic absorption spectrophotometry
		Cu, Pb (mg/l)	3	— Atomic absorption spectrophotometry — Polarography
	Hydrated oxides and hydroxides of iron (mg Fe/l)		3	Extraction of the sample under appropriate acid conditions; measurement by atomic absorption spectrophotometry or by molecular absorption spectrophotometry. The same method of acid extraction must be used for all samples coming from the same site

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Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of measurement
	mandatorily	optionally		
Sediments In the top layer of sediment as near the surface as possible	Total Ti, Fe (mg/kg dry matter)	V, Cr, Mn, Ni, Cu, Zn, Cd, Hg, Pb (mg/kg dry matter)	1	Identical methods to those for measurements in the water column. After appropriate preparation of the sample (wet or dry mineralization and purification). The quantities of metals must be measured for a specific range of particle sizes
	Hydrated oxides and hydroxides of iron (mg Fe/kg)		1	Identical methods to those for measurements in the water column
Living organisms Species representative of the site: benthic fish and invertebrates or other appropriate species (2)	Ti, Cr, Fe, Ni, Zn, Pb (mg/kg wet and dry weight)	V, Mn, Cu, Cd, Hg (mg/kg wet and dry weight)	1	Atomic absorption spectrophotometry after appropriate preparation of the composite sample of ground flesh (wet or dry mineralization and purification) — For fish, the metals must be measured in muscle or other appropriate tissue; the sample must consist of at least 10 specimens — For molluscs and crustaceans, the metals must be measured in the flesh. The sample must consist of at least 50 specimens
Benthic fauna	Diversity and relative abundance		1	Qualitative and quantitative classification of representative species, indicating the specimen count per species, density, dominance
Planktonic fauna		Diversity and relative abundance	1	Qualitative and quantitative classification of representative species, indicating the specimen count per species, density, dominance
Flora		Diversity and relative abundance	1	Qualitative and quantitative classification of representative species, indicating the specimen count per species, density, dominance
Fish in particular	Presence of morbid anatomical lesions in fish		1	Visual inspection of samples of the representative species taken for chemical analysis

(1) Member States may choose whether to analyse non-filtered or filtered water for substances under 'Parameters'.
(2) Species representative of the site of discharge in particular in terms of their sensitivity to bioaccumulation, e.g. Mytilus edulis, crangon crangon, flounder, plaice, cod, mackerel, red mullet, herring, sole (or other appropriate benthic species).

ANNEX III

METHOD OF WASTE DISPOSAL: DISCHARGE INTO FRESH SURFACE WATER

Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of measurement
	mandatorily	optionally		
Water column (1) Non-filtered fresh water	Temperature (°C)		3	Thermometry. Measurement is to be carried out on the spot at the time of sampling
	Conductivity at 20 °C (μS cm^{-1})		3	Electrometric measurement
	pH (pH unit)		3	Electrometry. Measurement is to be carried out on the spot at the time of sampling
	Dissolved O_2 (dissolved mg O_2/l)		3	— Winkler method — Electrochemical method
	Turbidity (mg solids/l or suspended matter (mg/l)		3	For turbidity: turbidimetry For suspended matter: gravimetry — Weighing after filtration through 0·45 μm membrane filter and drying at 105 °C — Weighing after centrifugation (minimum time five minutes, and average acceleration 2 800 to 3 200 g) and drying at 105 °C
Non-filtered fresh water (2)	Fe (dissolved and in suspension) (mg/l)		3	After the sample has been appropriatelyprepared, determination by atomic absorption spectrophotometry or by molecular absorption spectrophotometry
		Cr, total Cd, total Hg (mg/l)	3	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry
	Ti (mg/l)	V, Mn, Ni, Zn (mg/l)	3	Atomic absorption spectrophotometry

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Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of measurement
	mandatorily	optionally		
		Cu, Pb (mg/l)	3	— Atomic absorption spectrophotometry — Polarography
Fresh water filtered through 0·45 µm pore size membrane filter (2)	dissolved Fe (mg/l)		3	Measurement by atomic absorption spectrophotometry or by molecular absorption spectrophotometry
		Cr, Cd, Hg (mg/l)	3	— Atomic absorption — Molecular absorption spectrophotometry
		Ti, V, Mn, Ni, Sn (mg/l)	3	Atomic absorption spectrophotometry
		Cu, Pb (mg/l)	3	— Atomic absorption spectrophotometry — Polarography
Suspended solids remaining in 0·45 µm pore size membrane filter	Fe (mg/l)	Cr, Cd, Hg (mg/l)	3	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry
		Ti, V, Mn, Ni, Zn (mg/l)	3	Atomic absorption spectrophotometry
		Cu, Pb (mg/l)	3	— Atomic absorption spectrophotometry — Polarography
	Hydrated oxides and hydroxides of iron (mg Fe/l)		3	Extraction of the sample under appropriate acid conditions, measurement by atomic absorption spectrophotometry or by molecular absorption spectrophotometry. The same method of acid extraction must be used for all samples coming from the same site

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Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of measurement
	mandatorily	optionally		
Sediments In the top layer of sediment, as near the surface as possible	Ti, Fe (mg/kg dry matter)	V, Cr, Mn, Ni, Cu, Zn, Cd, Hg, Pb (mg/kg dry matter)	1	Identical methods to those for measurements in the water column. After appropriate preparation of the sample (wet or dry mineralization and purification). The quantities of metals must be measured for a specific range of particle sizes
	Hydrated oxides and hydroxides of iron (mg Fe/kg)		1	Identical methods to those for measurements in the water column
Living organisms Species representative of the site	Ti, Cr, Fe, Ni, Zn, Pb (mg/kg wet and dry weight)	V, Mn, Cu, Cd, Hg (mg/kg wet and dry weight)	1	Atomic absorption spectrophotometry after appropriate preparation of the composite sample of ground flesh (wet or dry mineralization and purification) — For fish, the metals must be measured in muscle or other appropriate tissue; the sample must consist of at least 10 specimens — For molluscs and crustaceans, the metals must be measured in the flesh. The sample must consist of at least 50 specimens
Benthic fauna	Diversity and relative abundance		1	Qualitative and quantitative classification of representative species, indicating the specimen count per species, density, dominance
Planktonic fauna		Diversity and relative abundance	1	Qualitative and quantitative classification of representative species, indicating the specimen count per species, density, dominance
Flora		Diversity and relative abundance	1	Qualitative and quantitative classification of representative species, indicating the specimen count per species, density, dominance
Fish in particular		Presence of morbid anatomical lesions in fish	1	Visual inspection of samples of the representative species taken for chemical analysis

(1) Samples must be taken at the same time of the year and if possible at a depth of 50 cm below the surface.
(2) Member States may choose whether to analyse non-filtered or filtered water for substances under 'Parameters'.

ANNEX IV

METHOD OF WASTE DISPOSAL: STORAGE AND DUMPING ON LAND

Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of analysis
	mandatorily	optionally		
1. *Unfiltered surface water*around the site in the area affected by the storage and at a point outside this area (1) (2) (3) 2. *Unfiltered groundwater*around the site including, where necessary, outflow points (1) (2)	pH (pH unit)		1	Electrometry. Measurement is to be carried out at the time of sampling
	SO_4 (4) (mg/l)		1	— Gravimetry — Complexometric titration with EDTA — Molecular absorption spectrophotometry
	Ti (5) (mg/l)	V, Mn, Ni, Zn (mg/l)	1	Atomic absorption spectrophotometry
	Fe (6) (mg/l)	Cr (mg/l)	1	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry
	Ca (mg/l)		1	— Atomic absorption spectrophotometry — Complexometric titration
		Cu, Pb (mg/l)	1	— Atomic absorption spectrophotometry — Polarography
	Cl (5) (mg/l)		1	Titrimetry (Mohr method)
Environment of the storage and dumping site	Visual inspection of: — topography and site management — effect on subsoil		1	Methods to be chosen by Member States

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Components	Parameters to be determined		Minimum annual sampling and analysis frequency	Reference method of analysis
	mandatorily	optionally		
	— ecology of the site			

([1]) Sampling must be carried out at the same time of year.
([2]) When monitoring surface water and groundwater, particular attention is to be paid to any matter carried by running water from the waste storage area.
([3]) Sampling must be carried out 50 cm beneath the surface of the water, if possible.
([4]) Mandatory determination where storage or dumping contains waste from the sulphate process.
([5]) Mandatory determination where storage or dumping contains waste from the chlorine process.
([6]) Also includes the measurement of Fe in the filtrate (suspended solids).

ANNEX V

METHOD OF WASTE DISPOSAL: INJECTION INTO SOIL

Components	Parameters to be determined		Minimum annual sampling frequency and analysis	Reference method of analysis
	mandatorily	optionally		
1. *Unfiltered surface water* around the site in the zone affected by the injection 2. *Unfiltered groundwater* around the site including out-flow points	pH (pH unit)		1	Electrometry. Measurement is to be carried out at the time of sampling
	SO_4 (1) (mg/l)		1	— Gravimetry — Complexometric titration with EDTA — Molecular absorption spectrophotometry
	Ti (2) (mg/l)	V, Mn, Ni, Zn (mg/l)	1	Atomic absorption spectrophotometry
	Fe (3) (mg/l)	Cr (mg/l)	1	— Atomic absorption spectrophotometry — Molecular absorption spectrophotometry
	Ca (mg/l)		1	— Atomic absorption spectrophotometry — Complexometric titration
		Cu, Pb (mg/l)	1	— Atomic absorption spectrophotometry — Polarography
	Cl (2) (mg/l)		1	Titrimetry (Mohr method)
Environment Topography	Ground stability		1	Photographic and topographic survey
	Permeability Porosity		1	Pumping tests Well-logging

(1) Mandatory determination where waste from the sulphate process is injected into soil.
(2) Mandatory determination where waste from the chlorine process is injected into soil.
(3) Also includes the measurement of Fe in the filtrate (suspended solids).

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COUNCIL DIRECTIVE
of 20 February 1978
on waste from the titanium dioxide industry

(78/176/EEC)

(OJ L 54, 25.2.1978, p. 19)

Amended by:

		Official Journal		
		No	page	date
►**M1**	Council Directive 82/883/EEC of 3 December 1982	L 378	1	31.12.1982
►**M2**	Council Directive 83/29/EEC of 24 January 1983	L 32	28	3.2.1983
►**M3**	Council Directive 91/692/EEC of 23 December 1991	L 377	48	31.12.1991

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COUNCIL DIRECTIVE

of 20 February 1978

on waste from the titanium dioxide industry

(78/176/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament [1],

Having regard to the opinion of the Economic and Social Committee [2],

Whereas waste from the titanium dioxide industry is liable to be harmful to human health and the environment; whereas it is therefore necessary to prevent and gradually reduce pollution caused by such waste with a view to eliminating it;

Whereas the 1973 [3] and 1977 [4] European Communities' Programmes of Action on the Environment refer to the need to undertake Community action against waste from the titanium dioxide industry;

Whereas any disparity between the provisions on waste from the titanium dioxide industry already applicable or in preparation in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market; whereas it is therefore necessary to approximate laws in this field, as provided for in Article 100 of the Treaty;

Whereas it seems necessary for this approximation of laws to be accompanied by Community action so that one of the aims of the Community in the sphere of protection of the environment and improvement of the quality of life can be achieved by more extensive rules; whereas certain specific provisions to this effect should therefore be laid down; whereas Article 235 of the Treaty should be invoked as the powers required for this purpose have not been provided for by the Treaty;

Whereas Directive 75/442/EEC [5], concerns waste disposal in general; whereas for waste from the titanium dioxide industry it is advisable to lay down a special system which will ensure that human health and the environment are protected against the harmful effects caused by the uncontrolled discharge, dumping or tipping of such waste;

Whereas in order to attain these objectives there should be a system of prior authorization as regards the discharge, dumping, storage, tipping or injecting of waste; whereas the issue of this authorization should be made subject to specific conditions;

Whereas discharge, dumping, storage, tipping and injecting of waste must be accompanied both by monitoring of the waste and monitoring and surveillance of the environment concerned;

Whereas for existing industrial establishments Member States must, by 1 July 1980, draw up programmes for the progressive reduction of pollution caused by such waste with a view to its elimination; whereas these programmes must fix the general reduction targets to be attained by 1 July 1987 at the latest and indicate the measures to be taken for each establishment;

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[1] OJ No C 28, 9. 2. 1976, p. 16.
[2] OJ No C 131, 12. 6. 1976, p. 18.
[3] OJ No C 112, 20. 12. 1973, p. 3.
[4] OJ No C 139, 13. 6. 1977, p. 3.
[5] OJ No L 194, 25. 7. 1975, p. 39.

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Whereas for new industrial establishments Member States must issue a prior authorization; whereas such authorization must be preceded by an environmental impact study and may be granted only to firms which undertake to use only those materials, processes and techniques available on the market that are least damaging to the environment,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. The aim of this Directive is the prevention and progressive reduction, with a view to its elimination, of pollution caused by waste from the titanium dioxide industry.

2. For the purpose of this Directive:

(a) 'pollution' means the discharge by man, directly or indirectly, of any residue from the titanium dioxide manufacturing process into the environment, the results of which are such as to cause hazards to human health, harm to living resources and to ecosystems, damage to amenities or interference with other legitimate uses of the environment concerned;

(b) 'waste' means:

— any residue from the titanium dioxide manufacturing process of which the holder disposes or is obliged to dispose under current national legislation;

— any residue from a treatment process of a residue referred to in the first indent;

(c) 'disposal' means:

— the collection, sorting, transport and treatment of waste as well as its storage and tipping above ground or underground and its injection into the ground;

— the discharge thereof into surface water, ground water and the sea, and dumping at sea;

— the transformation operations necessary for its re-use, recovery or recycling;

(d) 'existing industrial establishments' means those industrial establishments already set up on the date of notification of this Directive;

(e) 'new industrial establishments' means those industrial establishments which are in the process of being set up on the date of entry into force of this Directive or which are set up after that date. Extensions to existing industrial establishments leading to an increase of 15 000 tonnes per year or more in the titanium dioxide on-site production capacity of the establishment concerned shall be treated as new industrial establishments.

Article 2

Member States shall take the necessary measures to ensure that waste is disposed of without endangering human health and without harming the environment, and in particular:

— without risk to water, air, soil and plants and animals;

— without deleteriously affecting beauty-spots or the countryside.

Article 3

Member States shall take appropriate measures to encourage the prevention, recycling and processing of waste, the extraction of raw materials and any other process for the re-use of waste.

Article 4

1. The discharge, dumping, storage, tipping and injection of waste are prohibited unless prior authorization is issued by the competent authority of the Member State in whose territory the waste is produced.

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Prior authorization must also be issued by the competent authority of the Member State

— in whose territory the waste is discharged, stored, tipped or injected;

— from whose territory it is discharged or dumped.

2. Authorization may be granted for a limited period only. It may be renewed.

Article 5

In the case of discharge or dumping, the competent authority may, in accordance with Article 2 and on the basis of the information supplied in accordance with Annex I, grant the authorization referred to in Article 4 provided that:

(a) the waste cannot be disposed of by more appropriate means;

(b) an assessment carried out in the light of available scientific and technical knowledge shows that there will be no deleterious effect, either immediate or delayed, on the aquatic environment;

(c) there is no deleterious effect on boating, fishing, leisure activities, the extraction of raw materials, desalination, fish and shellfish breeding, on regions of special scientifc importance or on other legitimate uses of the waters in question.

Article 6

In the case of storage, tipping or injection, the competent authority may, in accordance with Article 2, and on the basis of the information supplied in accordance with Annex I, grant the authorization referred to in Article 4, provided that:

(a) the waste cannot be disposed of by more appropriate means;

(b) an assessment carried out in the light of available scientific and technical knowledge shows that there will be no detrimental effect, either immediate or delayed, on underground waters, the soil or the atmosphere;

(c) there is no deleterious effect on leisure activities, the extraction of raw materials, plants, animals, on regions of special scientific importance or on other legitimate uses of the environment in question.

Article 7

1. Irrespective of the method and extent of treatment of the waste in question, its discharge, dumping, storage, tipping and injection shall be accompanied by the monitoring referred to in Annex II of the waste and of the environment concerned having regard to its physical, chemical, biological and ecological aspects.

2. The monitoring operations shall be carried out periodically by one or more bodies appointed by the Member State the competent authority of which has issued the authorization provided for in Article 4. In the case of cross-frontier pollution between Member States, the body in question shall be appointed jointly by the parties concerned.

3. Within one year of notification of this Directive, the Commission shall submit to the Council a proposal on the procedures for the surveillance and monitoring of the environments concerned. The Council shall act on this proposal within six months of the publication of the opinion of the European Parliament and that of the Economic and Social Committee in the *Official Journal of the European Communities*.

Article 8

1. The competent authority in the Member State concerned shall take all appropriate steps to remedy one of the following situations

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and, if necessary, shall require the suspension of discharge, dumping, storage, tipping or injection operations:

(a) if the results of the monitoring provided for in Annex II (A) (1) show that the conditions for the prior authorization referred to in Articles 4, 5 and 6 have not been fulfilled, or

(b) if the results of the acute toxicity tests referred to in Annex II (A) (2) show that the limits laid down therein have been exceeded, or

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(c) if the results of the monitoring which the Member States are obliged to carry out on the environment concerned reveal a deterioration in the area under consideration, or

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(d) if discharge or dumping produces a deleterious effect on boating, fishing, leisure activities, the extraction of raw materials, desalination, fish and shellfish breeding, on regions of special scientific importance or on other legitimate uses of the waters in question, or

(e) if storage, tipping or injection produces a deleterious effect on leisure activities, the extraction of raw materials, plants, animals, on regions of special scientific importance or on other legitimate uses of the environments in question.

2. If several Member States are concerned, the measures shall be taken after consultation.

Article 9

1. Member States shall draw up programmes for the progressive reduction and eventual elimination of pollution caused by waste from existing industrial establishments.

2. The programmes mentioned in paragraph 1 shall set general targets for the reduction of pollution from liquid, solid and gaseous waste, to be achieved by 1 July 1987 at the latest. The programmes shall also contain intermediate objectives. They shall, moreover, contain information on the state of the environment concerned, on measures for reducing pollution and on methods for treating waste that is directly caused by the manufacturing processes.

3. ►M2 By 1 July 1980 at the latest the programmes referred to in paragraph 1 shall be sent to the Commission, which, before 15 March 1983, shall submit suitable proposals to the Council ◄ for the harmonization of these programmes in regard to the reduction and eventual elimination of pollution and the improvement of the conditions of competition in the titanium dioxide industry. The Council shall act on these proposals within six months of the publication of the opinion of the European Parliament and that of the Economic and Social Committee in the *Official Journal of the European Communities*.

4. Member States shall introduce a programme by 1 January 1982 at the latest.

Article 10

1. The programmes referred to in Article 9 (1) must cover all existing industrial establishments and must set out the measures to be taken in respect of each of them.

2. Where, in particular circumstances, a Member State considers that, in the case of an individual establishment, no additional measures are necessary to fulfil the requirements of this Directive, it shall, within six months of notification of this Directive, provide the Commission with the evidence which has led it to that conclusion.

3. After conducting any independent verification of the evidence that may be necessary, the Commission may agree with the Member State that it is not neccessary to take additional measures in respect of the individual establishment concerned. The Commission must give its agreement, with reasons, within six months.

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4. If the Commission does not agree with the Member State, additional measures in respect of that establishment shall be included in the programme of the Member State concerned.

5. If the Commission does agree, its agreement will be periodically reviewed in the light of the results of the monitoring carried out pursuant to this Directive and in the light of any significant change in the manufacturing processes or in environmental policy objectives.

Article 11

New industrial establishments shall be subject to applications for prior authorization made to the competent authorities of the Member State on whose territory it is proposed to build the establishments. Such authorizations must be preceded by environmental impact surveys. They may be granted only to firms which give an undertaking to use only such of the materials, processes and techniques available on the market as are least damaging to the environment.

Article 12

Without prejudice to this Directive, Member States may adopt more stringent regulations.

Article 13

1. For the purposes of this Directive, Member States shall supply the Commission with all the necessary information relating to:

— the authorizations issued pursuant to Articles 4, 5 and 6,

— the results of the monitoring of the environment concerned carried out pursuant to Article 7,

— the measures taken pursuant to Article 8.

They shall also supply the Commission with general information concerning the materials, processes and techniques notified to them pursuant to Article 11.

2. Information acquired as a result of the application of this Article may be used only for the purposes of this Directive.

3. The Commission and the competent authorities of the Member States, their officials and other servants shall not disclose information acquired by them pursuant to this Directive and of a kind covered by the obligation of professional secrecy.

4. Paragraphs 2 and 3 shall not prevent publication of general information or surveys which do not contain information relating to particular undertakings or associations of undertakings.

Article 14

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At intervals of three years the Member States shall send information to the Commission on the implementation of this Directive, in the form of a sectoral report which shall also cover other pertinent Community Directives. This report shall be drawn up on the basis of a questionnaire or outline drafted by the Commission in accordance with the procedure laid down in Article 6 of Directive 91/692/EEC [1]. The questionaire or outline shall be sent to the Member States six months before the start of the period covered by the report. The report shall be sent to the Commission within nine months of the end of the three-year period covered by it.

The first report shall cover the period from 1993 to 1995 inclusive.

The Commission shall publish a Community report on the implementation of the Directive within nine months of receiving the reports from the Member States.

[1] OJ No L 377, 31. 12. 1991, p. 48.

▼B

Article 15

1. Member States shall bring into force the measures needed to comply with this Directive within 12 months, of its notification and shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the national laws which they adopt in the field covered by this Directive.

Article 16

This Directive is addressed to the Member States.

▼B

ANNEX I

PARTICULARS WHICH MUST BE SUPPLIED IN ORDER TO OBTAIN THE PRIOR AUTHORIZATION REFERRED TO IN ARTICLES 4, 5 AND 6

A. **Characteristics and composition of the matter:**

1. total amount and average compositions of matter dumped (e.g. per year);
2. form (e.g. solid, sludge, liquid or gaseous);
3. properties: physical (e.g. solubility and density), chemical and biochemical (e.g. oxygen demand) and biological;
4. toxicity;
5. persistence: physical, chemical and biological;
6. accumulation and biotransformation in biological materials or sediments;
7. susceptibility to physical, chemical and biochemical changes and interaction in the environment concerned with other organic and inorganic materials;
8. probability of production of taints or other changes reducing marketability of resources (fish, shellfish, etc.).

B. **Characteristics of dumping or discharge site and methods of disposal:**

1. location (e.g. coordinates of the dumping or discharge area, depth and distance from the coast), location in relation to other areas (e.g. amenity areas, spawning, nursery and fishing areas and exploitable resources);
2. rate of disposal per specific period (e.g. quantity per day, per week, per month);
3. methods of packaging and containment, if any;
4. initial dilution achieved by proposed method of release, particularly the speed of the ship;
5. dispersal characteristics (e.g. effects of currents, tides, and wind on horizontal transport and vertical mixing);
6. water characteristics (e.g. temperature, pH, salinity, stratification, oxygen indices of pollution — dissolved oxygen (DO), chemical oxygen demand (COD), biochemical oxygen demand (BOD), nitrogen present in organic and inorganic form, including ammonia, suspended matter, other nutrients and productivity);
7. bottom characteristics (e.g. topography, geochemical and geological characteristics and biological productivity);
8. existence and effects of other dumpings or discharges which have been made in the area concerned (e.g. heavy metal background reading and organic carbon content).

C. **Characteristics of the tipping, storage or injection area and disposal methods:**

1. geographical siuation;
2. characteristics of adjacent areas;
3. methods of packaging and containment, if any;
4. characteristics of the methods of tipping, storage and injection, including an assessment of precautions taken to avoid the pollution of waters, the soil and the atmosphere.

▼B

ANNEX II

SURVEILLANCE AND MONITORING OF DISPOSAL

A. **Monitoring of waste**

Disposal operations shall be accompanied by:

1. checks on the quantity, composition and toxicity of the waste to ensure that the conditions for prior authorization referred to in Articles 4, 5 and 6 are fulfilled;

2. tests for acute toxicity on certain species of molluscs, crustaceans, fish and plankton, preferably species commonly found in the discharge areas. In addition, tests shall be carried out on samples of the brine shrimp species (Artemia salina).

   Over a period of 36 hours and at an effluent dilution of 1/5 000, these tests must not reveal:

   — more than 20 % mortality for adult forms of the species tested,

   — and for larval forms, mortality exceeding that of a control group.

B. **Surveillance and monitoring of the environment concerned**

I. In The case of discharge into fresh water or into the sea or in the case of dumping, such checks shall relate to the three following items: water column, living matter and sediments. Periodic checks on the state of the area affected by the discharges will make it possible to follow the development of the environments concerned.

   Monitoring shall include the determination of:

   1. pH;

   2. dissolved oxygen;

   3. turbidity;

   4. hydrated iron oxides and hydroxides in suspension;

   5. toxic metals in water, suspended solids, sediments and in accumulation in selected benthic and pelagic organisms;

   6. the diversity and the relative and absolute abundance of flora and fauna.

II. In the case of storage, tipping or injection the monitoring shall include:

   1. tests to ensure that surface waters and ground waters are not contaminated. These tests shall include the measurement of:

      — acidity,

      — iron content (soluble and particulate),

      — calcium content,

      — toxic metal content (soluble and particulate) if any;

   2. where necessary, tests to determine any adverse effects on the structure of the subsoils;

   3. a general assessment of the ecology of the area in the vicinity of the tipping, storage or injection point.

COMMISSION DECISION

of 16 May 2011

establishing a forum for the exchange of information pursuant to Article 13 of the Directive 2010/75/EU on industrial emissions

(2011/C 146/03)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) (Recast) [1] (the Directive), and in particular Article 13(3) thereof,

Whereas:

(1) Article 13(1) of the Directive requires the Commission to organise an exchange of information between Member States, the industries concerned, non-governmental organisations promoting environmental protection and the Commission.

(2) Article 13(3) of the Directive requires the Commission to establish and regularly convene a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection and to obtain the opinion of the forum on the practical arrangements for the exchange of information foreseen under that Article.

(3) Article 13(4) of the Directive requires the Commission to obtain and make publicly available the opinion of the forum on the proposed content of BAT reference documents.

(4) It is therefore necessary to establish a forum and to define its tasks and its structure.

(5) The forum should provide its opinion on the practical arrangements for the exchange of information and on the proposed content of BAT reference documents.

(6) The forum should be composed of Member States, international organisations representing industries concerned by the activities covered by Annex I of the Directive and non-governmental organisations promoting environmental protection.

(7) Rules on disclosure of information by members of the forum should be laid down.

(8) Personal data should be processed in accordance with Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data [2],

HAS DECIDED AS FOLLOWS:

Article 1

Subject matter

A forum to promote the exchange of information pursuant to Article 13(3) of the Directive is hereby established.

Article 2

Task

The forum's task shall be:

(a) to provide its opinion on the practical arrangements for the exchange of information in accordance with the second subparagraph of Article 13(3) of the Directive;

(b) to provide its opinion on the proposed content of BAT reference documents in accordance with Article 13(4) of the Directive.

Article 3

Consultation

The Commission may consult the forum on any matter relating to Article 13 of the Directive or on any matter relating to BAT as defined in Article 3(10) of the Directive.

Article 4

Membership — Appointment

1. Members shall be Member States, international organisations representing industries concerned by the activities covered by Annex I of the Directive and non-governmental organisations promoting environmental protection. Those organisations shall have an acceptable degree of European representation.

2. Members of the Commission Expert Group 'Information Exchange Forum on Best Available Techniques under legislation on industrial emissions' (E00466) shall automatically be considered as members of the forum.

3. New members who are not Member States shall be appointed by the Director General of DG Environment.

4. Members who are no longer capable of contributing effectively to the forum's deliberations, who resign or who do not comply with Article 339 of the Treaty, may be replaced.

[1] OJ L 334, 17.12.2010, p. 17.

[2] OJ L 8, 12.1.2001, p. 1.

5. The names of member organisations shall be published in the Register. The names of Member States' representatives may be published in the Register.

6. Personal data shall be collected, processed and published in accordance with Regulation (EC) No 45/2001.

Article 5

Operation

1. The forum shall be chaired by the Commission.

2. In agreement with the Commission, the forum may establish sub-groups to examine specific questions on the basis of terms of reference defined by the forum. Such sub-groups shall cease to exist as soon as their mandate is fulfilled. The sub-groups shall be chaired by the Commission. The chair of the sub-group shall report back to the forum.

3. The representatives of EEA countries shall be invited to attend meetings of the forum, in accordance with the EEA Protocol.

4. Representatives of acceding countries shall be invited to attend the meetings of the forum as from the date of signature of the Treaty of accession.

5. The Chair may invite experts from outside the forum with specific competence in a subject on the agenda to participate in the work of the forum or sub-group on an ad hoc basis. In addition, the Chair may give observer status to individuals, organisations as defined in Rule 8(3) of the horizontal rules on expert groups ([1]) and candidate countries.

6. Members of the forum and their representatives, as well as invited experts and observers, shall comply with the obligations of professional secrecy laid down by the Treaties and their implementing rules, as well as with the Commission's rules on security regarding the protection of EU classified information, laid down in the Annex to Commission Decision 2001/844/EC, ECSC, Euratom ([2]). Should they fail to respect these obligations, the Commission may take all appropriate measures.

7. The meetings of the forum and its sub-groups shall be held on Commission premises. The Commission shall provide secretarial services.

8. The forum shall adopt, by simple majority of its members, its rules of procedure on the basis of the standard rules of procedure for expert groups.

9. The Commission publishes relevant information on the activities carried out by the forum either by including it in the Register or via a link from the Register to a dedicated website.

Article 6

Meeting expenses

1. Participants in the activities of the forum shall not be remunerated for the services they render.

2. Travel expenses incurred by participants in the activities of the forum may be reimbursed by the Commission. Reimbursement shall be made in accordance with the provisions in force within the Commission and within the limits of the available appropriations allocated to the Commission services under the annual procedure for the allocation of resources.

Done at Brussels, 16 May 2011.

For the Commission

Janez POTOČNIK

Member of the Commission

([1]) C(2010) 7649 final.

([2]) Commission Decision of 29 November 2001 amending its internal Rules of Procedure (OJ L 317, 3.12.2001, p. 1).

I

(Legislative acts)

DIRECTIVES

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 4 July 2012

on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee [1],

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure [2],

Whereas:

(1) Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances [3] lays down rules for the prevention of major accidents which might result from certain industrial activities and the limitation of their consequences for human health and the environment.

(2) Major accidents often have serious consequences, as evidenced by accidents like Seveso, Bhopal, Schweizerhalle, Enschede, Toulouse and Buncefield. Moreover the impact can extend beyond national borders. This underlines the need to ensure that appropriate precautionary action is taken to ensure a high level of protection throughout the Union for citizens, communities and the environment. There is therefore a need to ensure that the existing high level of protection remains at least the same or increases.

(3) Directive 96/82/EC has been instrumental in reducing the likelihood and consequences of such accidents thereby leading to a better level of protection throughout the Union. A review of that Directive has confirmed that the rate of major accidents has remained stable. While overall the existing provisions are fit for purpose, some changes are required in order to further strengthen the level of protection, in particular with regard to the prevention of major accidents. At the same time the system established by Directive 96/82/EC should be adapted to changes to the Union system of classification of substances and mixtures to which that Directive refers. In addition, a number of other provisions should be clarified and updated.

(4) It is therefore appropriate to replace Directive 96/82/EC in order to ensure that the existing level of protection is maintained and further improved, by making the provisions more effective and efficient, and where possible by reducing unnecessary administrative burdens by streamlining or simplification, provided that safety and environmental and human health protection are not compromised. At the same time, the new provisions should be clear, coherent and easy to understand to help improve implementation and enforceability, while the level of protection of human health and the environment remains at least the same or increases. The Commission should cooperate with the Member States on the practical implementation of this Directive. That cooperation should, inter alia, address the issue of self-classification of substances and mixtures. As appropriate, stakeholders such as representatives of industry, workers and non-governmental organisations promoting the protection of human health or the environment should be involved in the implementation of this Directive.

[1] OJ C 248, 25.8.2011, p. 138.
[2] Position of the European Parliament of 14 June 2012 and decision of the Council of 26 June 2012.
[3] OJ L 10, 14.1.1997, p. 13.

(5) The Convention of the United Nations Economic Commission for Europe on the Transboundary Effects of Industrial Accidents, which was approved on behalf of the Union by Council Decision 98/685/EC of 23 March 1998 concerning the conclusion of the Convention on the Transboundary Effects of Industrial Accidents ([1]), provides for measures regarding the prevention of, preparedness for, and response to industrial accidents capable of causing transboundary effects as well as for international cooperation in this field. Directive 96/82/EC implements the Convention within Union law.

(6) Major accidents can have consequences beyond frontiers, and the ecological and economic costs of an accident are borne not only by the establishment affected, but also by the Member States concerned. It is therefore necessary to establish and apply safety and risk-reduction measures to prevent possible accidents, to reduce the risk of accidents occurring and to minimise the effects if they do occur, thereby making it possible to ensure a high level of protection throughout the Union.

(7) The provisions of this Directive should apply without prejudice to the provisions of Union law relating to health and safety at work and the working environment, and, in particular, without prejudice to Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work ([2]).

(8) Certain industrial activities should be excluded from the scope of this Directive provided they are subject to other legislation at Union or national level providing for an equivalent level of safety. The Commission should continue to examine whether there are significant gaps in the existing regulatory framework, in particular as regards new and emerging risks from other activities as well as from specific dangerous substances and, if appropriate, present a legislative proposal to address those gaps.

(9) Annex I to Directive 96/82/EC lists the dangerous substances falling within its scope, inter alia, by reference to certain provisions of Council Directive 67/548/EEC of 27 June 1967 on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances ([3]) as well as Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations ([4]). Directives 67/548/EEC and 1999/45/EC have been replaced by Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures ([5]), which implements within the Union the Globally Harmonised System of Classification and Labelling of Chemicals that has been adopted at international level, within the structure of the United Nations (UN). That Regulation introduces new hazard classes and categories only partially corresponding to those used under those repealed Directives. Certain substances or mixtures would, however, not be classified under that system due to an absence of criteria within that framework. Annex I to Directive 96/82/EC therefore needs to be amended to align it to that Regulation while maintaining the existing level, or further increasing the level, of protection provided for in that Directive.

(10) For the purpose of classifying upgraded biogas, any developments on standards under the European Committee for Standardisation (CEN) should be taken into account.

(11) Unwanted effects from the alignment to Regulation (EC) No 1272/2008 and subsequent adaptations to that Regulation having an impact on the classification of substances and mixtures may occur. On the basis of criteria included in this Directive, the Commission should assess whether, notwithstanding their hazard classification, there are dangerous substances which do not present a major-accident hazard and, where appropriate, submit a legislative proposal to exclude the dangerous substance concerned from the scope of this Directive. The assessment should start swiftly, in particular after the change of classification of a substance or mixture, in order to avoid unnecessary burdens for operators and competent authorities in the Member States. Exclusions from the scope of this Directive should not prevent any Member State from maintaining or introducing more stringent protective measures.

(12) Operators should have a general obligation to take all necessary measures to prevent major accidents, to mitigate their consequences and to take recovery measures. Where dangerous substances are present in establishments above certain quantities the operator should provide the competent authority with sufficient information to enable it to identify the establishment, the dangerous substances present and the potential dangers. The operator should also draw up and, where required by national law, send to the competent authority a major-accident prevention policy (MAPP) setting out the operator's overall approach and measures, including appropriate safety management systems, for controlling major-accident hazards. When the operators identify and evaluate the major-accident hazards, consideration should also be given to the dangerous substances which may be generated during a severe accident within the establishment.

([1]) OJ L 326, 3.12.1998, p. 1.
([2]) OJ L 183, 29.6.1989, p. 1.
([3]) OJ 196, 16.8.1967, p. 1.
([4]) OJ L 200, 30.7.1999, p. 1.
([5]) OJ L 353, 31.12.2008, p. 1.

(13) Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage [1] is normally relevant for environmental damage caused by a major accident.

(14) In order to reduce the risk of domino effects, where establishments are sited in such a way or so close together as to increase the likelihood of major accidents, or aggravate their consequences, operators should cooperate in the exchange of appropriate information and in informing the public, including neighbouring establishments that could be affected.

(15) In order to demonstrate that all that is necessary has been done to prevent major accidents, and to prepare emergency plans and response measures, the operator should, in the case of establishments where dangerous substances are present in significant quantities, provide the competent authority with information in the form of a safety report. That safety report should contain details of the establishment, the dangerous substances present, the installation or storage facilities, possible major-accident scenarios and risk analysis, prevention and intervention measures and the management systems available, in order to prevent and reduce the risk of major accidents and to enable the necessary steps to be taken to limit the consequences thereof. The risk of a major accident could be increased by the probability of natural disasters associated with the location of the establishment. This should be considered during the preparation of major-accident scenarios.

(16) To prepare for emergencies, in the case of establishments where dangerous substances are present in significant quantities, it is necessary to establish internal and external emergency plans and to establish procedures to ensure that those plans are tested and revised as necessary and implemented in the event of a major accident or the likelihood thereof. The staff of an establishment should be consulted on the internal emergency plan and the public concerned should have the opportunity to give its opinion on the external emergency plan. Sub-contracting may have an impact on the safety of an establishment. Member States should require operators to take this into account when drafting a MAPP, a safety report or an internal emergency plan.

(17) When considering the choice of appropriate operating methods, including those for monitoring and control, operators should take into account available information on best practices.

(18) In order to provide greater protection for residential areas, areas of substantial public use and the environment, including areas of particular natural interest or sensitivity, it is necessary for land-use or other relevant policies applied in the Member States to ensure appropriate distances between such areas and establishments presenting such hazards and, where existing establishments are concerned, to implement, if necessary, additional technical measures so that the risk to persons or the environment is maintained at an acceptable level. Sufficient information about the risks and technical advice on these risks should be taken into account when decisions are taken. Where possible, to reduce administrative burdens, especially for small and medium-sized enterprises, procedures and measures should be integrated with those under other relevant Union legislation.

(19) In order to promote access to environmental information under the Convention of the United Nations Economic Commission for Europe on access to information, public participation in decision-making and access to justice in environmental matters (the Aarhus Convention), which was approved on behalf of the Union by Council Decision 2005/370/EC of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision-making and access to justice in environmental matters [2], the level and quality of information to the public should be improved. In particular, persons likely to be affected by a major accident should be given sufficient information on the correct action to be taken in that event. Member States should make information available on where to find information on the rights of persons affected by a major accident. Information disseminated to the public should be worded clearly and intelligibly. In addition to providing information in an active way, without the public having to submit a request, and without precluding other forms of dissemination, it should also be made available permanently and kept up to date electronically. At the same time there should be appropriate confidentiality safeguards, to address security-related concerns, among others.

(20) The way information is managed should be in line with the Shared Environmental Information System (SEIS) initiative introduced by the Commission Communication of 1 February 2008 entitled 'Towards a Shared Environmental Information System (SEIS)'. It should also be in line with Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) [3] and its implementing rules, aimed at enabling the sharing of environmental spatial information among public sector organisations and better facilitating public access to spatial information across the Union. Information should be held on a publicly available database at Union level, which will also facilitate monitoring and reporting on implementation.

[1] OJ L 143, 30.4.2004, p. 56.

[2] OJ L 124, 17.5.2005, p. 1.

[3] OJ L 108, 25.4.2007, p. 1.

(21) In line with the Aarhus Convention, effective public participation in decision-making is necessary to enable the public concerned to express, and the decision-maker to take account of, opinions and concerns that may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken.

(22) In order to ensure that adequate response measures are taken if a major accident occurs, the operator should immediately inform the competent authority and communicate the information necessary to enable it to assess the effects of that accident on human health and on the environment.

(23) Local authorities have an interest in the prevention of major accidents and mitigation of their consequences and can have an important role to play. This should be taken into account by the Member States in the implementation of this Directive.

(24) In order to facilitate the exchange of information and to prevent future accidents of a similar nature, Member States should forward information to the Commission regarding major accidents occurring on their territory, so that the Commission can analyse the hazards involved, and operate a system for the distribution of information concerning, in particular, major accidents and lessons learned from them. That exchange of information should also cover 'near misses' which Member States regard as being of particular technical interest for preventing major accidents and limiting their consequences. Member States and the Commission should strive to ensure the completeness of the information held on information systems established to facilitate the exchange of information on major accidents.

(25) Member States should determine the competent authorities responsible for ensuring that operators fulfil their obligations. The competent authorities and the Commission should cooperate in activities in support of implementation such as the development of appropriate guidance and exchanges of best practice. To avoid unnecessary administrative burden, information obligations should be integrated, where appropriate, with those under other relevant Union legislation.

(26) Member States should ensure that competent authorities take the necessary measures in the event of non-compliance with this Directive. In order to ensure effective implementation and enforcement, there should be a system of inspections, including a programme of routine inspections at regular intervals and non-routine inspections. Where possible, inspections should be coordinated with those under other Union legislation, including Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [1], where appropriate. Member States should ensure that sufficient staff is available with the skills and qualifications needed to carry out inspections effectively. Competent authorities should provide appropriate support using tools and mechanisms for exchanging experience and consolidating knowledge, including at Union level.

(27) In order to take into account technical developments, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending Annexes II to VI to adapt them to technical progress. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level. The Commission, when preparing and drawing up delegated acts, should ensure a simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and to the Council.

(28) In order to ensure uniform conditions for the implementation of this Directive, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by the Member States of the Commission's exercise of implementing powers [2].

(29) Member States should lay down rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.

(30) Since the objective of this Directive, namely to ensure a high level of protection of human health and the environment, cannot be sufficiently achieved by Member States and can, therefore, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective.

[1] OJ L 334, 17.12.2010, p. 17.
[2] OJ L 55, 28.2.2011, p. 13.

(31) In accordance with the Joint Political Declaration of Member States and the Commission of 28 September 2011 on explanatory documents [1], Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.

(32) Directive 96/82/EC should therefore be amended and subsequently repealed,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Subject matter

This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.

Article 2

Scope

1. This Directive shall apply to establishments as defined in Article 3(1).

2. This Directive shall not apply to any of the following:

(a) military establishments, installations or storage facilities;

(b) hazards created by ionising radiation originating from substances;

(c) the transport of dangerous substances and directly related intermediate temporary storage by road, rail, internal waterways, sea or air, outside the establishments covered by this Directive, including loading and unloading and transport to and from another means of transport at docks, wharves or marshalling yards;

(d) the transport of dangerous substances in pipelines, including pumping stations, outside establishments covered by this Directive;

(e) the exploitation, namely the exploration, extraction and processing, of minerals in mines and quarries, including by means of boreholes;

(f) the offshore exploration and exploitation of minerals, including hydrocarbons;

(g) the storage of gas at underground offshore sites including both dedicated storage sites and sites where exploration and exploitation of minerals, including hydrocarbons are also carried out;

(h) waste land-fill sites, including underground waste storage.

Notwithstanding points (e) and (h) of the first subparagraph, onshore underground gas storage in natural strata, aquifers, salt cavities and disused mines and chemical and thermal processing operations and storage related to those operations which involve dangerous substances, as well as operational tailings disposal facilities, including tailing ponds or dams, containing dangerous substances shall be included within the scope of this Directive.

Article 3

Definitions

For the purposes of this Directive the following definitions shall apply:

1. 'establishment' means the whole location under the control of an operator where dangerous substances are present in one or more installations, including common or related infrastructures or activities; establishments are either lower-tier establishments or upper-tier establishments;

2. 'lower-tier establishment' means an establishment where dangerous substances are present in quantities equal to or in excess of the quantities listed in Column 2 of Part 1 or in Column 2 of Part 2 of Annex I, but less than the quantities listed in Column 3 of Part 1 or in Column 3 of Part 2 of Annex I, where applicable using the summation rule laid down in note 4 to Annex I;

3. 'upper-tier establishment' means an establishment where dangerous substances are present in quantities equal to or in excess of the quantities listed in Column 3 of Part 1 or in Column 3 of Part 2 of Annex I, where applicable using the summation rule laid down in note 4 to Annex I;

4. 'neighbouring establishment' means an establishment that is located in such proximity to another establishment so as to increase the risk or consequences of a major accident;

5. 'new establishment' means

   (a) an establishment that enters into operation or is constructed, on or after 1 June 2015; or

[1] OJ C 369, 17.12.2011, p. 14.

(b) a site of operation that falls within the scope of this Directive, or a lower-tier establishment that becomes an upper-tier establishment or vice versa, on or after 1 June 2015 due to modifications to its installations or activities resulting in a change in its inventory of dangerous substances;

6. 'existing establishment' means an establishment that on 31 May 2015 falls within the scope of Directive 96/82/EC and from 1 June 2015 falls within the scope of this Directive without changing its classification as a lower-tier establishment or upper-tier establishment;

7. 'other establishment' means a site of operation that falls within the scope of this Directive, or a lower-tier establishment that becomes an upper-tier establishment or vice versa, on or after 1 June 2015 for reasons other than those referred to in point 5;

8. 'installation' means a technical unit within an establishment and whether at or below ground level, in which dangerous substances are produced, used, handled or stored; it includes all the equipment, structures, pipework, machinery, tools, private railway sidings, docks, unloading quays serving the installation, jetties, warehouses or similar structures, floating or otherwise, necessary for the operation of that installation;

9. 'operator' means any natural or legal person who operates or controls an establishment or installation or, where provided for by national legislation, to whom the decisive economic or decision-making power over the technical functioning of the establishment or installation has been delegated;

10. 'dangerous substance' means a substance or mixture covered by Part 1 or listed in Part 2 of Annex I, including in the form of a raw material, product, by-product, residue or intermediate;

11. 'mixture' means a mixture or solution composed of two or more substances;

12. 'presence of dangerous substances' means the actual or anticipated presence of dangerous substances in the establishment, or of dangerous substances which it is reasonable to foresee may be generated during loss of control of the processes, including storage activities, in any installation within the establishment, in quantities equal to or exceeding the qualifying quantities set out in Part 1 or Part 2 of Annex I;

13. 'major accident' means an occurrence such as a major emission, fire, or explosion resulting from uncontrolled developments in the course of the operation of any establishment covered by this Directive, and leading to serious danger to human health or the environment, immediate or delayed, inside or outside the establishment, and involving one or more dangerous substances;

14. 'hazard' means the intrinsic property of a dangerous substance or physical situation, with a potential for creating damage to human health or the environment;

15. 'risk' means the likelihood of a specific effect occurring within a specified period or in specified circumstances;

16. 'storage' means the presence of a quantity of dangerous substances for the purposes of warehousing, depositing in safe custody or keeping in stock;

17. 'the public' means one or more natural or legal persons and, in accordance with national law or practice, their associations, organisations or groups;

18. 'the public concerned' means the public affected or likely to be affected by, or having an interest in, the taking of a decision on any of the matters covered by Article 15(1); for the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any applicable requirements under national law shall be deemed to have an interest;

19. 'inspection' means all actions, including site visits, checks of internal measures, systems and reports and follow-up documents, and any necessary follow-up, undertaken by or on behalf of the competent authority to check and promote compliance of establishments with the requirements of this Directive.

Article 4

Assessment of major-accident hazards for a particular dangerous substance

1. The Commission shall assess, where appropriate or in any event on the basis of a notification by a Member State in accordance with paragraph 2, whether it is impossible in practice for a particular dangerous substance covered by Part 1 or listed in Part 2 of Annex I, to cause a release of matter or energy that could create a major accident under both normal and abnormal conditions which can reasonably be foreseen. That assessment shall take into account the information referred to in paragraph 3, and shall be based on one or more of the following characteristics:

(a) the physical form of the dangerous substance under normal processing or handling conditions or in an unplanned loss of containment;

(b) the inherent properties of the dangerous substance, in particular those related to dispersive behaviour in a major-accident scenario, such as molecular mass and saturated vapour pressure;

(c) the maximum concentration of the substances in the case of mixtures.

For the purposes of the first subparagraph, the containment and generic packing of the dangerous substance should, where appropriate, also be taken into account, including in particular where covered under specific Union legislation.

2. Where a Member State considers that a dangerous substance does not present a major-accident hazard in accordance with paragraph 1, it shall notify the Commission together with supporting justification, including the information referred to in paragraph 3.

3. For the purposes of paragraphs 1 and 2, information necessary for assessing the health, physical and environmental hazard properties of the dangerous substance concerned shall include:

(a) a comprehensive list of properties necessary to assess the dangerous substance's potential for causing physical, health or environmental harm;

(b) physical and chemical properties (for instance molecular mass, saturated vapour pressure, inherent toxicity, boiling point, reactivity, viscosity, solubility and other relevant properties);

(c) health and physical hazard properties (for instance reactivity, flammability, toxicity together with additional factors such as mode of attack on the body, injury to fatality ratio, and long-term effects, and other properties as relevant);

(d) environmental hazard properties (for instance ecotoxicity, persistence, bio-accumulation, potential for long-range environmental transport, and other properties as relevant);

(e) where available, the Union classification of the substance or mixture;

(f) information about substance-specific operating conditions (for instance temperature, pressure and other conditions as relevant) under which the dangerous substance is stored, used and/or may be present in the event of foreseeable abnormal operations or an accident such as fire.

4. Following the assessment referred to in paragraph 1, the Commission shall, if appropriate, present a legislative proposal to the European Parliament and to the Council to exclude the dangerous substance concerned from the scope of this Directive.

Article 5

General obligations of the operator

1. Member States shall ensure that the operator is obliged to take all necessary measures to prevent major accidents and to limit their consequences for human health and the environment.

2. Member States shall ensure that the operator is required to prove to the competent authority referred to in Article 6, at any time, in particular for the purposes of inspections and controls referred to in Article 20, that the operator has taken all necessary measures as specified in this Directive.

Article 6

Competent authority

1. Without prejudice to the operator's responsibilities, Member States shall set up or appoint the competent authority or authorities responsible for carrying out the duties laid down in this Directive ('the competent authority') and, if necessary, bodies to assist the competent authority at technical level. Member States which set up or appoint more than one competent authority shall ensure that the procedures for carrying out their duties are fully coordinated.

2. The competent authorities and the Commission shall cooperate in activities in support of implementation of this Directive, involving stakeholders as appropriate.

3. Member States shall ensure that competent authorities accept equivalent information submitted by operators in accordance with other relevant Union legislation, which fulfils any of the requirements of this Directive, for the purposes of this Directive. In such cases the competent authorities shall ensure that the requirements of this Directive are complied with.

Article 7

Notification

1. Member States shall require the operator to send a notification to the competent authority containing the following information:

(a) the name and/or trade name of the operator and the full address of the establishment concerned;

(b) the registered place of business of the operator, with the full address;

(c) the name and position of the person in charge of the establishment, if different from point (a);

(d) information sufficient to identify the dangerous substances and category of substances involved or likely to be present;

(e) the quantity and physical form of the dangerous substance or substances concerned;

(f) the activity or proposed activity of the installation or storage facility;

(g) the immediate environment of the establishment, and factors likely to cause a major accident or to aggravate the consequences thereof including, where available, details of neighbouring establishments, of sites that fall outside the scope of this Directive, areas and developments that could be the source of or increase the risk or consequences of a major accident and of domino effects.

2. The notification or its update shall be sent to the competent authority within the following time-limits:

(a) for new establishments, a reasonable period of time prior to the start of construction or operation, or prior to the modifications leading to a change in the inventory of dangerous substances;

(b) for all other cases, one year from the date from which this Directive applies to the establishment concerned.

3. Paragraphs 1 and 2 shall not apply if the operator has already sent a notification to the competent authority under the requirements of national legislation before 1 June 2015, and the information contained therein complies with paragraph 1 and has remained unchanged.

4. The operator shall inform the competent authority in advance of the following events:

(a) any significant increase or decrease in the quantity or significant change in the nature or physical form of the dangerous substance present, as indicated in the notification provided by the operator pursuant to paragraph 1, or a significant change in the processes employing it;

(b) modification of an establishment or an installation which could have significant consequences in terms of major-accident hazards;

(c) the permanent closure of the establishment or its decommissioning; or

(d) changes in the information referred to in points (a), (b) or (c) of paragraph 1.

Article 8

Major-accident prevention policy

1. Member States shall require the operator to draw up a document in writing setting out the major-accident prevention policy (MAPP) and to ensure that it is properly implemented. The MAPP shall be designed to ensure a high level of protection of human health and the environment. It shall be proportionate to the major-accident hazards. It shall include the operator's overall aims and principles of action, the role and responsibility of management, as well as the commitment towards continuously improving the control of major-accident hazards, and ensuring a high level of protection.

2. The MAPP shall be drawn up and, where required by national law, sent to the competent authority within the following time-limits:

(a) for new establishments, a reasonable period of time prior to the start of construction or operation, or prior to the modifications leading to a change in the inventory of dangerous substances;

(b) for all other cases, one year from the date from which this Directive applies to the establishment concerned.

3. Paragraphs 1 and 2 shall not apply if the operator has already established the MAPP and, where required by national law, sent it to the competent authority before 1 June 2015, and the information contained therein complies with paragraph 1 and has remained unchanged.

4. Without prejudice to Article 11, the operator shall periodically review and where necessary update the MAPP, at least every five years. Where required by national law the updated MAPP shall be sent to the competent authority without delay.

5. The MAPP shall be implemented by appropriate means, structures and by a safety management system, in accordance with Annex III, proportionate to the major-accident hazards, and the complexity of the organisation or the activities of the establishment. For lower-tier establishments, the obligation to implement the MAPP may be fulfilled by other appropriate means, structures and management systems, proportionate to major-accident hazards, taking into account the principles set out in Annex III.

Article 9

Domino effects

1. Member States shall ensure that the competent authority, using the information received from the operators in accordance with Articles 7 and 10, or following a request for additional information from the competent authority, or through inspections pursuant to Article 20, identifies all lower-tier and upper-tier establishments or groups of establishments where the risk or consequences of a major accident may be increased because of the geographical position and the proximity of such establishments, and their inventories of dangerous substances.

2. Where the competent authority has additional information to that provided by the operator pursuant to point (g) of Article 7(1), it shall make this information available to that operator, if it is necessary for the application of this Article.

3. Member States shall ensure that operators of the establishments identified in accordance with paragraph 1:

(a) exchange suitable information to enable those establishments to take account of the nature and extent of the overall hazard of a major accident in their MAPP, safety management systems, safety reports and internal emergency plans, as appropriate;

(b) cooperate in informing the public and neighbouring sites that fall outside the scope of this Directive, and in supplying information to the authority responsible for the preparation of external emergency plans.

Article 10

Safety report

1. Member States shall require the operator of an upper-tier establishment to produce a safety report for the purposes of:

(a) demonstrating that a MAPP and a safety management system for implementing it have been put into effect in accordance with the information set out in Annex III;

(b) demonstrating that major-accident hazards and possible major-accident scenarios have been identified and that the necessary measures have been taken to prevent such accidents and to limit their consequences for human health and the environment;

(c) demonstrating that adequate safety and reliability have been taken into account in the design, construction, operation and maintenance of any installation, storage facility, equipment and infrastructure connected with its operation which are linked to major-accident hazards inside the establishment;

(d) demonstrating that internal emergency plans have been drawn up and supplying information to enable the external emergency plan to be drawn up;

(e) providing sufficient information to the competent authority to enable decisions to be made regarding the siting of new activities or developments around existing establishments.

2. The safety report shall contain at least the data and information listed in Annex II. It shall name the relevant organisations involved in the drawing up of the report.

3. The safety report shall be sent to the competent authority within the following time-limits:

(a) for new establishments, a reasonable period of time prior to the start of construction or operation, or prior to the modifications leading to a change in the inventory of dangerous substances;

(b) for existing upper-tier establishments, 1 June 2016;

(c) for other establishments, two years from the date from which this Directive applies to the establishment concerned.

4. Paragraphs 1, 2 and 3 shall not apply if the operator has already sent the safety report to the competent authority under the requirements of national law before 1 June 2015, and the information contained therein complies with paragraphs 1 and 2 and has remained unchanged. In order to comply with paragraphs 1 and 2, the operator shall submit any changed parts of the safety report in the format agreed by the competent authority, subject to the time-limits referred to in paragraph 3.

5. Without prejudice to Article 11, the operator shall periodically review and where necessary update the safety report at least every five years.

The operator shall also review and where necessary update the safety report following a major accident at its establishment, and at any other time at the initiative of the operator or at the request of the competent authority, where justified by new facts or by new technological knowledge about safety matters, including knowledge arising from analysis of accidents or, as far as possible, 'near misses', and by developments in knowledge concerning the assessment of hazards.

The updated safety report or updated parts thereof shall be sent to the competent authority without delay.

6. Before the operator commences construction or operation, or in the cases referred to in points (b) and (c) of paragraph 3 and in paragraph 5 of this Article, the competent authority shall within a reasonable period of receipt of the report communicate the conclusions of its examination of the safety report to the operator and, where appropriate, in accordance with Article 19, prohibit the bringing into use, or the continued use, of the establishment concerned.

Article 11

Modification of an installation, an establishment or a storage facility

In the event of the modification of an installation, establishment, storage facility, or process or of the nature or physical form or quantity of dangerous substances which could have significant consequences for major-accident hazards, or could result in a lower-tier establishment becoming an upper-tier establishment or vice versa, Member States shall ensure that the operator reviews, and where necessary updates the notification, the MAPP, the safety management system and the safety report and informs the competent authority of the details of those updates in advance of that modification.

Article 12

Emergency plans

1. Member States shall ensure that, for all upper-tier establishments:

(a) the operator draws up an internal emergency plan for the measures to be taken inside the establishment;

(b) the operator supplies the necessary information to the competent authority, to enable the latter to draw up external emergency plans;

(c) the authorities designated for that purpose by the Member State draw up an external emergency plan for the measures to be taken outside the establishment within two years following receipt of the necessary information from the operator pursuant to point (b).

2. Operators shall comply with the obligations set out in points (a) and (b) of paragraph 1 within the following time-limits:

(a) for new establishments, a reasonable period of time prior to the start of operation, or prior to the modifications leading to a change in the inventory of dangerous substances;

(b) for existing upper-tier establishments, by 1 June 2016 unless the internal emergency plan drawn up under the requirements of national law before that date, and the information contained therein, and the information referred to in point (b) of paragraph 1, complies with this Article and has remained unchanged;

(c) for other establishments, two years from the date from which this Directive applies to the establishment concerned.

3. The emergency plans shall be established with the following objectives:

(a) containing and controlling incidents so as to minimise the effects, and to limit damage to human health, the environment and property;

(b) implementing the necessary measures to protect human health and the environment from the effects of major accidents;

(c) communicating the necessary information to the public and to the services or authorities concerned in the area;

(d) providing for the restoration and clean-up of the environment following a major accident.

Emergency plans shall contain the information set out in Annex IV.

4. Member States shall ensure that the internal emergency plans provided for in this Directive are drawn up in consultation with the personnel working inside the establishment, including long-term relevant subcontracted personnel.

5. Member States shall ensure that the public concerned is given early opportunity to give its opinion on external emergency plans when they are being established or substantially modified.

6. Member States shall ensure that internal and external emergency plans are reviewed, tested, and where necessary updated by the operators and designated authorities respectively at suitable intervals of no longer than three years. The review shall take into account changes occurring in the establishments concerned or within the emergency services concerned, new technical knowledge, and knowledge concerning the response to major accidents.

With regard to external emergency plans, Member States shall take into account the need to facilitate enhanced cooperation in civil protection assistance in major emergencies.

7. Member States shall ensure that emergency plans are put into effect without delay by the operator and, if necessary, by the competent authority designated for this purpose when a major accident occurs, or when an uncontrolled event occurs which by its nature could reasonably be expected to lead to a major accident.

8. The competent authority may decide, giving reasons for their decision, in view of the information contained in the safety report, that the requirement to produce an external emergency plan under paragraph 1 shall not apply.

Article 13

Land-use planning

1. Member States shall ensure that the objectives of preventing major accidents and limiting the consequences of such accidents for human health and the environment are taken into account in their land-use policies or other relevant policies. They shall pursue those objectives through controls on:

(a) the siting of new establishments;

(b) modifications to establishments covered by Article 11;

(c) new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting or developments may be the source of or increase the risk or consequences of a major accident.

2. Member States shall ensure that their land-use or other relevant policies and the procedures for implementing those policies take account of the need, in the long term:

(a) to maintain appropriate safety distances between establishments covered by this Directive and residential areas, buildings and areas of public use, recreational areas, and, as far as possible, major transport routes;

(b) to protect areas of particular natural sensitivity or interest in the vicinity of establishments, where appropriate through appropriate safety distances or other relevant measures;

(c) in the case of existing establishments, to take additional technical measures in accordance with Article 5 so as not to increase the risks to human health and the environment.

3. Member States shall ensure that all competent authorities and planning authorities responsible for decisions in this area set up appropriate consultation procedures to facilitate implementation of the policies established under paragraph 1. The procedures shall be designed to ensure that operators provide sufficient information on the risks arising from the establishment and that technical advice on those risks is available, either on a case-by-case or on a generic basis, when decisions are taken.

Member States shall ensure that operators of lower-tier establishments provide, at the request of the competent authority, sufficient information on the risks arising from the establishment necessary for land-use planning purposes.

4. The requirements of paragraphs 1, 2 and 3 of this Article shall apply without prejudice to the provisions of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment [1], Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment [2] and other relevant Union legislation. Member States may provide for coordinated or joint procedures in order to fulfil the requirements of this Article and the requirements of that legislation, inter alia, to avoid duplication of assessment or consultations.

Article 14

Information to the public

1. Member States shall ensure that the information referred to in Annex V is permanently available to the public, including electronically. The information shall be kept updated, where necessary, including in the event of modifications covered by Article 11.

2. For upper-tier establishments, Member States shall also ensure that:

(a) all persons likely to be affected by a major accident receive regularly and in the most appropriate form, without having to request it, clear and intelligible information on safety measures and requisite behaviour in the event of a major accident;

(b) the safety report is made available to the public upon request subject to Article 22(3); where Article 22(3) applies, an amended report, for instance in the form of a non-technical summary, which shall include at least general information on major-accident hazards and on potential effects on human health and the environment in the event of a major accident, shall be made available;

(c) the inventory of dangerous substances is made available to the public upon request subject to Article 22(3).

The information to be supplied under point (a) of the first subparagraph of this paragraph shall include at least the information referred to in Annex V. That information shall likewise be supplied to all buildings and areas of public use, including schools and hospitals, and to all neighbouring establishments in the case of establishments covered by Article 9. Member States shall ensure that the information is supplied at least every five years and periodically reviewed and where necessary, updated, including in the event of modifications covered by Article 11.

3. Member States shall, with respect to the possibility of a major accident with transboundary effects originating in an upper-tier establishment, provide sufficient information to the

[1] OJ L 26, 28.1.2012, p. 1.
[2] OJ L 197, 21.7.2001, p. 30.

potentially affected Member States so that all relevant provisions contained in Articles 12 and 13 and in this Article can be applied, where applicable, by the potentially affected Member States.

4. Where the Member State concerned has decided that an establishment close to the territory of another Member State is incapable of creating a major-accident hazard beyond its boundary for the purposes of Article 12(8) and is not therefore required to produce an external emergency plan under Article 12(1), it shall inform the other Member State of its reasoned decision.

Article 15

Public consultation and participation in decision-making

1. Member States shall ensure that the public concerned is given an early opportunity to give its opinion on specific individual projects relating to:

(a) planning for new establishments pursuant to Article 13;

(b) significant modifications to establishments under Article 11, where such modifications are subject to obligations provided for in Article 13;

(c) new developments around establishments where the siting or developments may increase the risk or consequences of a major accident pursuant to Article 13.

2. With regard to the specific individual projects referred to in paragraph 1, the public shall be informed by public notices or other appropriate means, including electronic media where available, of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:

(a) the subject of the specific project;

(b) where applicable, the fact that a project is subject to a national or transboundary environmental impact assessment or to consultations between Member States in accordance with Article 14(3);

(c) details of the competent authority responsible for taking the decision, from which relevant information can be obtained and to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;

(d) the nature of possible decisions or, where there is one, the draft decision;

(e) an indication of the times and places where, or means by which, the relevant information will be made available;

(f) details of the arrangements for public participation and consultation made pursuant to paragraph 7 of this Article.

3. With regard to the specific individual projects referred to in paragraph 1, Member States shall ensure that, within appropriate time-frames, the following is made available to the public concerned:

(a) in accordance with national legislation, the main reports and advice issued to the competent authority at the time when the public concerned was informed pursuant to paragraph 2;

(b) in accordance with the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information [1], information other than that referred to in paragraph 2 of this Article which is relevant for the decision in question and which only becomes available after the public concerned was informed in accordance with that paragraph.

4. Member States shall ensure that the public concerned is entitled to express comments and opinions to the competent authority before a decision is taken on a specific individual project as referred to in paragraph 1, and that the results of the consultations held pursuant to paragraph 1 are duly taken into account in the taking of a decision.

5. Member States shall ensure that when the relevant decisions are taken, the competent authority shall make available to the public:

(a) the content of the decision and the reasons on which it is based, including any subsequent updates;

(b) the results of the consultations held before the decision was taken and an explanation of how they were taken into account in that decision.

6. Where general plans or programmes are being established relating to the matters referred to in points (a) or (c) of paragraph 1, Member States shall ensure that the public is given early and effective opportunities to participate in their preparation and modification or review using the procedures set out in Article 2(2) of Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment [2].

Member States shall identify the public entitled to participate for the purposes of this paragraph, including relevant non-governmental organisations meeting any relevant requirements imposed under national law, such as those promoting environmental protection.

[1] OJ L 41, 14.2.2003, p. 26.
[2] OJ L 156, 25.6.2003, p. 17.

This paragraph shall not apply to plans and programmes for which a public participation procedure is carried out under Directive 2001/42/EC.

7. The detailed arrangements for informing the public and consulting the public concerned shall be determined by the Member States.

Reasonable time-frames for the different phases shall be provided, allowing sufficient time for informing the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to the provisions of this Article.

Article 16

Information to be supplied by the operator and actions to be taken following a major accident

Member States shall ensure that, as soon as practicable following a major accident, the operator shall be required, using the most appropriate means to:

(a) inform the competent authority;

(b) provide the competent authority with the following information as soon as it becomes available:

(i) the circumstances of the accident;

(ii) the dangerous substances involved;

(iii) the data available for assessing the effects of the accident on human health, the environment and property;

(iv) the emergency measures taken;

(c) inform the competent authority of the steps envisaged to:

(i) mitigate the medium-term and long-term effects of the accident;

(ii) prevent any recurrence of such an accident;

(d) update the information provided if further investigation reveals additional facts which alter that information or the conclusions drawn.

Article 17

Action to be taken by the competent authority following a major accident

Following a major accident, Member States shall require the competent authority to:

(a) ensure that any urgent, medium-term and long-term measures which may prove necessary are taken;

(b) collect, by inspection, investigation or other appropriate means, the information necessary for a full analysis of the technical, organisational and managerial aspects of the accident;

(c) take appropriate action to ensure that the operator takes any necessary remedial measures;

(d) make recommendations on future preventive measures; and

(e) inform the persons likely to be affected, of the accident which has occurred and, where relevant, of the measures undertaken to mitigate its consequences.

Article 18

Information to be supplied by the Member States following a major accident

1. For the purpose of prevention and mitigation of major accidents, Member States shall inform the Commission of major accidents meeting the criteria of Annex VI which have occurred within their territory. They shall provide it with the following details:

(a) the Member State, the name and address of the authority responsible for the report;

(b) the date, time and place of the accident, including the full name of the operator and the address of the establishment involved;

(c) a brief description of the circumstances of the accident, including the dangerous substances involved, and the immediate effects on human health and the environment;

(d) a brief description of the emergency measures taken and of the immediate precautions necessary to prevent recurrence;

(e) the results of their analysis and recommendations.

2. The information referred to in paragraph 1 of this Article shall be provided as soon as practicable and at the latest within one year of the date of the accident, using the database referred to in Article 21(4). Where only preliminary information under point (e) of paragraph 1 can be provided within this time-limit for inclusion in the database, the information shall be updated once the results of further analysis and recommendations are available.

Reporting of the information referred to in point (e) of paragraph 1 by Member States may be delayed to allow for the completion of judicial proceedings where such reporting may affect those proceedings.

3. For the purposes of providing the information referred to in paragraph 1 of this Article by Member States, a report form shall be established in the form of implementing acts. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 27(2).

4. Member States shall inform the Commission of the name and address of any body which might have relevant information on major accidents and which is able to advise the competent authorities of other Member States which have to intervene in the event of such an accident.

Article 19

Prohibition of use

1. Member States shall prohibit the use or bringing into use of any establishment, installation or storage facility, or any part thereof where the measures taken by the operator for the prevention and mitigation of major accidents are seriously deficient. To this end, Member States shall, inter alia, take into account serious failures to take the necessary actions identified in the inspection report.

Member States may prohibit the use or bringing into use of any establishment, installation or storage facility, or any part thereof if the operator has not submitted the notification, reports or other information required by this Directive within the specified period.

2. Member States shall ensure that operators may appeal against a prohibition order by a competent authority under paragraph 1 to an appropriate body determined by national law and procedures.

Article 20

Inspections

1. Member States shall ensure that the competent authorities organise a system of inspections.

2. Inspections shall be appropriate to the type of establishment concerned. They shall not be dependent upon receipt of the safety report or any other report submitted. They shall be sufficient for a planned and systematic examination of the systems being employed at the establishment, whether of a technical, organisational or managerial nature, so as to ensure in particular that:

(a) the operator can demonstrate that he has taken appropriate measures, in connection with the various activities of the establishment, to prevent major accidents;

(b) the operator can demonstrate that he has provided appropriate means for limiting the consequences of major accidents, on-site and off-site;

(c) the data and information contained in the safety report, or any other report submitted, adequately reflects the conditions in the establishment;

(d) information has been supplied to the public pursuant to Article 14.

3. Member States shall ensure that all establishments are covered by an inspection plan at national, regional or local level and shall ensure that this plan is regularly reviewed and, where appropriate, updated.

Each inspection plan shall include the following:

(a) a general assessment of relevant safety issues;

(b) the geographical area covered by the inspection plan;

(c) a list of the establishments covered by the plan;

(d) a list of groups of establishments with possible domino effects pursuant to Article 9;

(e) a list of establishments where particular external risks or hazard sources could increase the risk or consequences of a major accident;

(f) procedures for routine inspections, including the programmes for such inspections pursuant to paragraph 4;

(g) procedures for non-routine inspections pursuant to paragraph 6;

(h) provisions on the co-operation between different inspection authorities.

4. Based on the inspection plans referred to in paragraph 3, the competent authority shall regularly draw up programmes for routine inspections for all establishments including the frequency of site visits for different types of establishments.

The period between two consecutive site visits shall not exceed one year for upper-tier establishments and three years for lower-tier establishments, unless the competent authority has drawn up an inspection programme based on a systematic appraisal of major-accident hazards of the establishments concerned.

5. The systematic appraisal of the hazards of the establishments concerned shall be based on at least the following criteria:

(a) the potential impacts of the establishments concerned on human health and the environment;

(b) the record of compliance with the requirements of this Directive.

Where appropriate, relevant findings of inspections carried out under other Union legislation shall also be taken into account.

6. Non-routine inspections shall be carried out to investigate serious complaints, serious accidents and 'near misses', incidents and occurrences of non-compliance as soon as possible.

7. Within four months after each inspection, the competent authority shall communicate the conclusions of the inspection and all the necessary actions identified to the operator. The competent authority shall ensure that the operator takes all those necessary actions within a reasonable period after receipt of the communication.

8. If an inspection has identified an important case of non-compliance with this Directive, an additional inspection shall be carried out within six months.

9. Inspections shall, where possible, be coordinated with inspections under other Union legislation and combined, where appropriate.

10. Member States shall encourage the competent authorities to provide mechanisms and tools for exchanging experience and consolidating knowledge, and to participate in such mechanisms at Union level where appropriate.

11. Member States shall ensure that operators provide the competent authorities with all necessary assistance to enable those authorities to carry out any inspection and to gather any information necessary for the performance of their duties for the purposes of this Directive, in particular to allow the authorities to fully assess the possibility of a major accident and to determine the scope of possible increased probability or aggravation of major accidents, to prepare an external emergency plan and to take into account substances which, due to their physical form, particular conditions or location, may require additional consideration.

Article 21

Information system and exchanges

1. Member States and the Commission shall exchange information on the experience acquired with regard to the prevention of major accidents and the limitation of their consequences. This information shall concern, in particular, the functioning of the measures provided for in this Directive.

2. By 30 September 2019, and every four years thereafter, Member States shall provide the Commission with a report on the implementation of this Directive.

3. For establishments covered by this Directive, Member States shall supply the Commission with at least the following information:

(a) the name or trade name of the operator and the full address of the establishment concerned;

(b) the activity or activities of the establishment.

The Commission shall set up and keep up to date a database containing the information supplied by the Member States. Access to the database shall be restricted to persons authorised by the Commission or the competent authorities of the Member States.

4. The Commission shall set up and keep at the disposal of Member States a database containing, in particular, details of the major accidents which have occurred within the territory of Member States, for the purpose of:

(a) the rapid dissemination of the information supplied by Member States pursuant to Article 18(1) and (2) among all competent authorities;

(b) distribution to competent authorities of an analysis of the causes of major accidents and the lessons learned from them;

(c) supply of information to competent authorities on preventive measures;

(d) provision of information on organisations able to provide advice or relevant information on the occurrence, prevention and mitigation of major accidents.

5. The Commission shall, by 1 January 2015, adopt implementing acts to establish the formats for communicating the information referred to in paragraphs 2 and 3 of this Article from Member States and the relevant databases referred to in paragraphs 3 and 4. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 27(2).

6. The databases referred to in paragraph 4 shall contain, at least:

(a) the information supplied by Member States in accordance with Article 18(1) and (2);

(b) an analysis of the causes of the accidents;

(c) the lessons learned from the accidents;

(d) the preventive measures necessary to prevent a recurrence.

7. The Commission shall make publicly available the non-confidential part of the data.

Article 22

Access to information and confidentiality

1. Member States shall ensure, in the interests of transparency, that the competent authority is required to make any information held pursuant to this Directive available to any natural or legal person who so requests in accordance with Directive 2003/4/EC.

2. Disclosure of any information required under this Directive, including under Article 14, may be refused or restricted by the competent authority where the conditions laid down in Article 4 of Directive 2003/4/EC are fulfilled.

3. Disclosure of the complete information referred to in points (b) and (c) of Article 14(2) held by the competent authority may be refused by that competent authority, without prejudice to paragraph 2 of this Article, if the operator has requested not to disclose certain parts of the safety report or the inventory of dangerous substances for the reasons provided for in Article 4 of Directive 2003/4/EC.

The competent authority may also decide for the same reasons that certain parts of the report or inventory shall not be disclosed. In such cases, and on approval of that authority, the operator shall supply to the competent authority an amended report or inventory excluding those parts.

Article 23

Access to justice

Member States shall ensure that:

(a) any applicant requesting information pursuant to points (b) or (c) of Article 14(2) or Article 22(1) of this Directive is able to seek a review in accordance with Article 6 of Directive 2003/4/EC of the acts or omissions of a competent authority in relation to such a request;

(b) in their respective national legal system, members of the public concerned have access to the review procedures set up in Article 11 of Directive 2011/92/EU for cases subject to Article 15(1) of this Directive.

Article 24

Guidance

The Commission may develop guidance on safety distance and domino effects.

Article 25

Amendment of Annexes

The Commission shall be empowered to adopt delegated acts in accordance with Article 26 in order to adapt Annexes II to VI to technical progress. Such adaptations shall not result in substantial changes in the obligations of the Member States and the operators as laid down in this Directive.

Article 26

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Article 25 shall be conferred on the Commission for a period of five years from 13 August 2012. The Commission shall draw up a report in respect of the delegation of power no later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than four months before the end of each period.

3. The delegation of power referred to in Article 25 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

5. A delegated act adopted pursuant to Article 25 shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 27

Committee procedure

1. The Commission shall be assisted by the Committee established by Directive 96/82/EC. That Committee is a committee within the meaning of Regulation (EU) No 182/2011.

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Article 28

Penalties

Member States shall determine penalties applicable to infringements of the national provisions adopted pursuant to this Directive. The penalties thus provided for shall be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 1 June 2015 and shall notify it without delay of any subsequent amendment affecting them.

Article 29

Reporting and review

1. By 30 September 2020, and every four years thereafter, the Commission, on the basis of information submitted by Member States in accordance with Article 18 and Article 21(2) and of information held in databases, as referred to in Article 21(3) and (4), and taking into account the implementation of Article 4, shall submit to the European Parliament and to the Council a report on the implementation and efficient functioning of this Directive, including information on major accidents that have occurred within the Union and their potential impact upon the implementation of this Directive. The Commission shall include in the first of those reports an assessment of the need to amend the scope of this Directive. Any report may, where appropriate, be accompanied by a legislative proposal.

2. In the context of relevant Union legislation, the Commission may examine the need to address the issue of financial responsibilities of the operator in relation to major accidents, including issues related to insurance.

Article 30

Amendment of Directive 96/82/EC

In Directive 96/82/EC, the words '(d) heavy fuel oils' are added to the heading 'Petroleum products' in Part 1 of Annex I.

Article 31

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 May 2015. They shall apply those measures from 1 June 2015.

Notwithstanding the first subparagraph, Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Article 30 of this Directive by 14 February 2014. They shall apply those measures from 15 February 2014.

They shall forthwith communicate to the Commission the text of those provisions.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 32

Repeal

1. Directive 96/82/EC is repealed with effect from 1 June 2015.

2. References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table set out in Annex VII.

Article 33

Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Article 34

Addressees

This Directive is addressed to the Member States.

Done at Strasbourg, 4 July 2012.

For the European Parliament	*For the Council*
The President	*The President*
M. SCHULZ	A. D. MAVROYIANNIS

LIST OF ANNEXES

ANNEX I

DANGEROUS SUBSTANCES

Dangerous substances covered by the hazard categories listed in Column 1 of Part 1 of this Annex are subject to the qualifying quantities set out in Columns 2 and 3 of Part 1.

Where a dangerous substance is covered by Part 1 of this Annex and is also listed in Part 2, the qualifying quantities set out in Columns 2 and 3 of Part 2 apply.

PART 1

Categories of dangerous substances

This Part covers all dangerous substances falling under the hazard categories listed in Column 1:

Column 1	Column 2	Column 3
Hazard categories in accordance with Regulation (EC) No 1272/2008	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	
	Lower-tier requirements	Upper-tier requirements
Section 'H' – HEALTH HAZARDS		
H1 ACUTE TOXIC Category 1, all exposure routes	5	20
H2 ACUTE TOXIC — Category 2, all exposure routes — Category 3, inhalation exposure *route* (see note 7)	50	200
H3 STOT SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE STOT SE Category 1	50	200
Section 'P' – PHYSICAL HAZARDS		
P1a EXPLOSIVES (see note 8) — Unstable explosives or — Explosives, Division 1.1, 1.2, 1.3, 1.5 or 1.6, or — Substances or mixtures having explosive properties according to method A.14 of Regulation (EC) No 440/2008 (see note 9) and do not belong to the hazard classes Organic peroxides or Self-reactive substances and mixtures	10	50
P1b EXPLOSIVES (see note 8) Explosives, Division 1.4 (see note 10)	50	200
P2 FLAMMABLE GASES Flammable gases, Category 1 or 2	10	50
P3a FLAMMABLE AEROSOLS (see note 11.1) 'Flammable' aerosols *Category 1 or 2*, containing flammable gases Category 1 or 2 or flammable liquids Category 1	150 *(net)*	500 *(net)*
P3b FLAMMABLE AEROSOLS (see note 11.1) 'Flammable' aerosols *Category 1 or 2*, not containing flammable gases Category 1 or 2 nor flammable liquids category 1 (see note 11.2)	5 000 *(net)*	50 000 *(net)*

Column 1	Column 2	Column 3
Hazard categories in accordance with Regulation (EC) No 1272/2008	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	
	Lower-tier requirements	Upper-tier requirements
P4 OXIDISING GASES Oxidising gases, Category 1	50	200
P5a FLAMMABLE LIQUIDS — Flammable liquids, Category 1, or — Flammable liquids Category 2 or 3 maintained at a temperature above their boiling point, or — Other liquids with a flash point ≤ 60 °C, maintained at a temperature above their boiling point (see note 12)	10	50
P5b FLAMMABLE LIQUIDS — Flammable liquids Category 2 or 3 where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, or — Other liquids with a flash point ≤ 60 °C where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards (see note 12)	50	200
P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b	5 000	50 000
P6a SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES Self-reactive substances and mixtures, Type A or B or organic peroxides, Type A or B	10	50
P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES Self-reactive substances and mixtures, Type C, D, E or F or organic peroxides, Type C, D, E, or F	50	200
P7 PYROPHORIC LIQUIDS AND SOLIDS Pyrophoric liquids, Category 1 Pyrophoric solids, Category 1	50	200
P8 OXIDISING LIQUIDS AND SOLIDS Oxidising Liquids, Category 1, 2 or 3, or Oxidising Solids, Category 1, 2 or 3	50	200
Section 'E' – ENVIRONMENTAL HAZARDS		
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200	500
Section 'O' – OTHER HAZARDS		
O1 Substances or mixtures with hazard statement EUH014	100	500
O2 Substances and mixtures which in contact with water emit flammable gases, Category 1	100	500
O3 Substances or mixtures with hazard statement EUH029	50	200

PART 2

Named dangerous substances

Column 1 Dangerous substances	CAS number (1)	Column 2	Column 3
		Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
1. Ammonium nitrate (see note 13)	—	5 000	10 000
2. Ammonium nitrate (see note 14)	—	1 250	5 000
3. Ammonium nitrate (see note 15)	—	350	2 500
4. Ammonium nitrate (see note 16)	—	10	50
5. Potassium nitrate (see note 17)	—	5 000	10 000
6. Potassium nitrate (see note 18)	—	1 250	5 000
7. Arsenic pentoxide, arsenic (V) acid and/or salts	1303-28-2	1	2
8. Arsenic trioxide, arsenious (III) acid and/or salts	1327-53-3		0,1
9. Bromine	7726-95-6	20	100
10. Chlorine	7782-50-5	10	25
11. Nickel compounds in inhalable powder form: nickel monoxide, nickel dioxide, nickel sulphide, trinickel disulphide, dinickel trioxide	—		1
12. Ethyleneimine	151-56-4	10	20
13. Fluorine	7782-41-4	10	20
14. Formaldehyde (concentration ≥ 90 %)	50-00-0	5	50
15. Hydrogen	1333-74-0	5	50
16. Hydrogen chloride (liquefied gas)	7647-01-0	25	250
17. Lead alkyls	—	5	50
18. Liquefied flammable gases, Category 1 or 2 (including LPG) and natural gas (see note 19)	—	50	200
19. Acetylene	74-86-2	5	50
20. Ethylene oxide	75-21-8	5	50
21. Propylene oxide	75-56-9	5	50
22. Methanol	67-56-1	500	5 000
23. 4, 4′-Methylene bis (2-chloraniline) and/or salts, in powder form	101-14-4		0,01
24. Methylisocyanate	624-83-9		0,15
25. Oxygen	7782-44-7	200	2 000
26. 2,4 -Toluene diisocyanate 2,6 -Toluene diisocyanate	584-84-9 91-08-7	10	100

Column 1 Dangerous substances	CAS number (1)	Column 2 Qualifying quantity (tonnes) for the application of Lower-tier requirements	Column 3 Upper-tier requirements
27. Carbonyl dichloride (phosgene)	75-44-5	0,3	0,75
28. Arsine (arsenic trihydride)	7784-42-1	0,2	1
29. Phosphine (phosphorus trihydride)	7803-51-2	0,2	1
30. Sulphur dichloride	10545-99-0		1
31. Sulphur trioxide	7446-11-9	15	75
32. Polychlorodibenzofurans and polychlorodibenzodioxins (including TCDD), calculated in TCDD equivalent (see note 20)	—		0,001
33. The following CARCINOGENS or the mixtures containing the following carcinogens at concentrations above 5 % by weight: 4-Aminobiphenyl and/or its salts, Benzotrichloride, Benzidine and/or salts, Bis (chloromethyl) ether, Chloromethyl methyl ether, 1,2-Dibromoethane, Diethyl sulphate, Dimethyl sulphate, Dimethylcarbamoyl chloride, 1,2-Dibromo-3-chloropropane, 1,2-Dimethylhydrazine, Dimethylnitrosamine, Hexamethylphosphoric triamide, Hydrazine, 2- Naphthylamine and/or salts, 4-Nitrodiphenyl, and 1,3 Propanesultone	—	0,5	2
34. Petroleum products and alternative fuels (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams) (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)	—	2 500	25 000
35. Anhydrous Ammonia	7664-41-7	50	200
36. Boron trifluoride	7637-07-2	5	20
37. Hydrogen sulphide	7783-06-4	5	20
38. Piperidine	110-89-4	50	200
39. Bis(2-dimethylaminoethyl) (methyl)amin	3030-47-5	50	200
40. 3-(2-Ethylhexyloxy)propylamin	5397-31-9	50	200
41. Mixtures (*) of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing less than 5 % active chlorine and not classified under any of the other hazard categories in Part 1 of Annex I.		200	500

(*) Provided that the mixture in the absence of sodium hypochlorite would not be classified as Aquatic Acute Category 1 [H400].

Column 1 Dangerous substances	CAS number (1)	Column 2 Qualifying quantity (tonnes) for the application of Lower-tier requirements	Column 3 Upper-tier requirements
42. Propylamine (see note 21)	107-10-8	500	2 000
43. Tert-butyl acrylate (see note 21)	1663-39-4	200	500
44. 2-Methyl-3-butenenitrile (see note 21)	16529-56-9	500	2 000
45. Tetrahydro-3,5-dimethyl-1,3,5,-thiadiazine-2-thione (Dazomet) (see note 21)	533-74-4	100	200
46. Methyl acrylate (see note 21)	96-33-3	500	2 000
47. 3-Methylpyridine (see note 21)	108-99-6	500	2 000
48. 1-Bromo-3-chloropropane (see note 21)	109-70-6	500	2 000

(1) The CAS number is shown only for indication.

NOTES TO ANNEX I

1. Substances and mixtures are classified in accordance with Regulation (EC) No 1272/2008.

2. Mixtures shall be treated in the same way as pure substances provided they remain within concentration limits set according to their properties under Regulation (EC) No 1272/2008, or its latest adaptation to technical progress, unless a percentage composition or other description is specifically given.

3. The qualifying quantities set out above relate to each establishment.

   The quantities to be considered for the application of the relevant Articles are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere at that establishment.

4. The following rules governing the addition of dangerous substances, or categories of dangerous substances, shall apply where appropriate:

   In the case of an establishment where no individual dangerous substance is present in a quantity above or equal to the relevant qualifying quantities, the following rule shall be applied to determine whether the establishment is covered by the relevant requirements of this Directive.

   This Directive shall apply to upper-tier establishments if the sum:

   $q_1/Q_{U1} + q_2/Q_{U2} + q_3/Q_{U3} + q_4/Q_{U4} + q_5/Q_{U5} + \ldots$ is greater than or equal to 1,

   where q_x = the quantity of dangerous substance x (or category of dangerous substances) falling within Part 1 or Part 2 of this Annex,

   and Q_{UX} = the relevant qualifying quantity for dangerous substance or category x from Column 3 of Part 1 or from Column 3 of Part 2 of this Annex.

   This Directive shall apply to lower-tier establishments if the sum:

   $q_1/Q_{L1} + q_2/Q_{L2} + q_3/Q_{L3} + q_4/Q_{L4} + q_5/Q_{L5} + \ldots$ is greater than or equal to 1,

   where q_x = the quantity of dangerous substance x (or category of dangerous substances) falling within Part 1 or Part 2 of this Annex,

and Q_{LX} = the relevant qualifying quantity for dangerous substance or category x from Column 2 of Part 1 or from Column 2 of Part 2 of this Annex.

This rule shall be used to assess the health hazards, physical hazards and environmental hazards. It must therefore be applied three times:

(a) for the addition of dangerous substances listed in Part 2 that fall within acute toxicity category 1, 2 or 3 (inhalation route) or STOT SE category 1, together with dangerous substances falling within section H, entries H1 to H3 of Part 1;

(b) for the addition of dangerous substances listed in Part 2 that are explosives, flammable gases, flammable aerosols, oxidising gases, flammable liquids, self-reactive substances and mixtures, organic peroxides, pyrophoric liquids and solids, oxidising liquids and solids, together with dangerous substances falling within section P, entries P1 to P8 of Part 1;

(c) for the addition of dangerous substances listed in Part 2 that fall within hazardous to the aquatic environment acute category 1, chronic category 1 or chronic category 2, together with dangerous substances falling within section E, entries E1 and E2 of Part 1.

The relevant provisions of this Directive apply where any of the sums obtained by (a), (b) or (c) is greater than or equal to 1.

5. In the case of dangerous substances which are not covered by Regulation (EC) No 1272/2008, including waste, but which nevertheless are present, or are likely to be present, in an establishment and which possess or are likely to possess, under the conditions found at the establishment, equivalent properties in terms of major-accident potential, these shall be provisionally assigned to the most analogous category or named dangerous substance falling within the scope of this Directive.

6. In the case of dangerous substances with properties giving rise to more than one classification, for the purposes of this Directive the lowest qualifying quantities shall apply. However, for the application of the rule in Note 4, the lowest qualifying quantity for each group of categories in Notes 4(a), 4(b) and 4(c) corresponding to the classification concerned shall be used.

7. Dangerous substances that fall within Acute Toxic Category 3 via the oral route (H 301) shall fall under entry H2 ACUTE TOXIC in those cases where neither acute inhalation toxicity classification nor acute dermal toxicity classification can be derived, for example due to lack of conclusive inhalation and dermal toxicity data.

8. The hazard class Explosives includes explosive articles (see Section 2.1 of Annex I to Regulation (EC) No 1272/2008). If the quantity of the explosive substance or mixture contained in the article is known, that quantity shall be considered for the purposes of this Directive. If the quantity of the explosive substance or mixture contained in the article is not known, then, for the purposes of this Directive, the whole article shall be treated as explosive.

9. Testing for explosive properties of substances and mixtures is only necessary if the screening procedure according to Appendix 6, Part 3 of the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (UN Manual of Tests and Criteria) [1] identifies the substance or mixture as potentially having explosive properties.

10. If Explosives of Division 1.4 are unpacked or repacked, they shall be assigned to the entry P1a, unless the hazard is shown to still correspond to Division 1.4, in accordance with Regulation (EC) No 1272/2008.

11.1. Flammable aerosols are classified in accordance with the Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers [2] (Aerosol Dispensers Directive). 'Extremely flammable' and 'Flammable' aerosols of Directive 75/324/EEC correspond to Flammable Aerosols Category 1 or 2 respectively of Regulation (EC) No 1272/2008.

11.2. In order to use this entry, it must be documented that the aerosol dispenser does not contain Flammable Gas Category 1 or 2 nor Flammable Liquid Category 1.

[1] More guidance on waiving of the test can be found in the A.14 method description, see Commission Regulation (EC) No 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 142, 31.5.2008, p. 1).

[2] OJ L 147, 9.6.1975, p. 40.

12. According to paragraph 2.6.4.5 in Annex I to Regulation (EC) No 1272/2008, liquids with a flash point of more than 35 °C need not be classified in Category 3 if negative results have been obtained in the sustained combustibility test L.2, Part III, section 32 of the UN Manual of Tests and Criteria. This is however not valid under elevated conditions such as high temperature or pressure, and therefore such liquids are included in this entry.

13. Ammonium nitrate (5 000 / 10 000): fertilisers capable of self-sustaining decomposition

This applies to ammonium nitrate-based compound/composite fertilisers (compound/composite fertilisers contain ammonium nitrate with phosphate and/or potash) which are capable of self-sustaining decomposition according to the UN Trough Test (see UN Manual of Tests and Criteria, Part III, subsection 38.2), and in which the nitrogen content as a result of ammonium nitrate is

— between 15,75 % [1] and 24,5 % [2] by weight, and either with not more than 0,4 % total combustible/organic materials or which fulfil the requirements of Annex III-2 to Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers [3],

— 15,75 % by weight or less and unrestricted combustible materials.

14. Ammonium nitrate (1 250 / 5 000): fertiliser grade

This applies to straight ammonium nitrate-based fertilisers and to ammonium nitrate-based compound/composite fertilisers which fulfil the requirements of Annex III-2 to Regulation (EC) No 2003/2003 and in which the nitrogen content as a result of ammonium nitrate is

— more than 24,5 % by weight, except for mixtures of straight ammonium nitrate-based fertilisers with dolomite, limestone and/or calcium carbonate with a purity of at least 90 %,

— more than 15,75 % by weight for mixtures of ammonium nitrate and ammonium sulphate,

— more than 28 % [4] by weight for mixtures of straight ammonium nitrate-based fertilisers with dolomite, limestone and/or calcium carbonate with a purity of at least 90 %.

15. Ammonium nitrate (350 / 2 500): technical grade

This applies to ammonium nitrate and mixtures of ammonium nitrate in which the nitrogen content as a result of the ammonium nitrate is

— between 24,5 % and 28 % by weight, and which contain not more than 0,4 % combustible substances,

— more than 28 % by weight, and which contain not more than 0,2 % combustible substances.

It also applies to aqueous ammonium nitrate solutions in which the concentration of ammonium nitrate is more than 80 % by weight.

16. Ammonium nitrate (10 / 50): 'off-specs' material and fertilisers not fulfilling the detonation test

This applies to

— material rejected during the manufacturing process and to ammonium nitrate and mixtures of ammonium nitrate, straight ammonium nitrate-based fertilisers and ammonium nitrate-based compound/composite fertilisers referred to in Notes 14 and 15, that are being or have been returned from the final user to a manufacturer, temporary storage or reprocessing plant for reworking, recycling or treatment for safe use, because they no longer comply with the specifications of Notes 14 and 15,

— fertilisers referred to in first indent of Note 13, and Note 14 to this Annex which do not fulfil the requirements of Annex III-2 to Regulation (EC) No 2003/2003.

17. Potassium nitrate (5 000 / 10 000)

This applies to those composite potassium-nitrate based fertilisers (in prilled/granular form) which have the same hazardous properties as pure potassium nitrate.

[1] 15,75 % nitrogen content by weight as a result of ammonium nitrate corresponds to 45 % ammonium nitrate.
[2] 24,5 % nitrogen content by weight as a result of ammonium nitrate corresponds to 70 % ammonium nitrate.
[3] OJ L 304, 21.11.2003, p. 1.
[4] 28 % nitrogen content by weight as a result of ammonium nitrate corresponds to 80 % ammonium nitrate.

18. Potassium nitrate (1 250 / 5 000)

This applies to those composite potassium-nitrate based fertilisers (in crystalline form) which have the same hazardous properties as pure potassium nitrate.

19. Upgraded biogas

For the purpose of the implementation of this Directive, upgraded biogas may be classified under entry 18 of Part 2 of Annex I where it has been processed in accordance with applicable standards for purified and upgraded biogas ensuring a quality equivalent to that of natural gas, including the content of Methane, and which has a maximum of 1 % Oxygen.

20. Polychlorodibenzofurans and polychlorodibenzodioxins

The quantities of polychlorodibenzofurans and polychlorodibenzodioxins are calculated using the following factors:

WHO 2005 TEF			
2,3,7,8-TCDD	1	2,3,7,8-TCDF	0,1
1,2,3,7,8-PeCDD	1	2,3,4,7,8-PeCDF	0,3
		1,2,3,7,8-PeCDF	0,03
1,2,3,4,7,8-HxCDD	0,1		
1,2,3,6,7,8-HxCDD	0,1	1,2,3,4,7,8-HxCDF	0,1
1,2,3,7,8,9-HxCDD	0,1	1,2,3,7,8,9-HxCDF	0,1
		1,2,3,6,7,8-HxCDF	0,1
1,2,3,4,6,7,8-HpCDD	0,01	2,3,4,6,7,8-HxCDF	0,1
OCDD	0,0003	1,2,3,4,6,7,8-HpCDF	0,01
		1,2,3,4,7,8,9-HpCDF	0,01
		OCDF	0,0003

(T = tetra, P = penta, Hx = hexa, Hp = hepta, O = octa)

Reference — Van den Berg et al: The 2005 World Health Organisation Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds

21. In cases where this dangerous substance falls within category P5a Flammable liquids or P5b Flammable liquids, then for the purposes of this Directive the lowest qualifying quantities shall apply.

ANNEX II

Minimum data and information to be considered in the safety report referred to in Article 10

1. Information on the management system and on the organisation of the establishment with a view to major-accident prevention.

   This information shall contain the elements indicated in Annex III.

2. Presentation of the environment of the establishment:

   (a) description of the establishment and its environment including the geographical location, meteorological, geological, hydrographic conditions and, if necessary, its history;

   (b) identification of installations and other activities of the establishment which could present a major-accident hazard;

   (c) on the basis of available information, identification of neighbouring establishments, as well as sites that fall outside the scope of this Directive, areas and developments that could be the source of, or increase the risk or consequences of a major accident and of domino effects;

   (d) description of areas where a major accident may occur.

3. Description of the installation:

   (a) description of the main activities and products of the parts of the establishment which are important from the point of view of safety, sources of major-accident risks and conditions under which such a major accident could happen, together with a description of proposed preventive measures;

   (b) description of processes, in particular the operating methods; where applicable, taking into account available information on best practices;

   (c) description of dangerous substances:

      (i) inventory of dangerous substances including:

         — the identification of dangerous substances: chemical name, CAS number, name according to IUPAC nomenclature,

         — the maximum quantity of dangerous substances present or likely to be present;

      (ii) physical, chemical, toxicological characteristics and indication of the hazards, both immediate and delayed for human health and the environment;

      (iii) physical and chemical behaviour under normal conditions of use or under foreseeable accidental conditions.

4. Identification and accidental risks analysis and prevention methods:

   (a) detailed description of the possible major-accident scenarios and their probability or the conditions under which they occur including a summary of the events which may play a role in triggering each of these scenarios, the causes being internal or external to the installation; including in particular:

      (i) operational causes;

      (ii) external causes, such as those related to domino effects, sites that fall outside the scope of this Directive, areas and developments that could be the source of, or increase the risk or consequences of a major accident;

      (iii) natural causes, for example earthquakes or floods;

   (b) assessment of the extent and severity of the consequences of identified major accidents including maps, images or, as appropriate, equivalent descriptions, showing areas which are likely to be affected by such accidents arising from the establishment;

(c) review of past accidents and incidents with the same substances and processes used, consideration of lessons learned from these, and explicit reference to specific measures taken to prevent such accidents;

(d) description of technical parameters and equipment used for the safety of installations.

5. Measures of protection and intervention to limit the consequences of a major accident:

(a) description of the equipment installed in the plant to limit the consequences of major accidents for human health and environment, including for example detection/protection systems, technical devices for limiting the size of accidental releases, including water spray; vapour screens; emergency catch pots or collection vessels; shut-off-valves; inerting systems; fire water retention;

(b) organisation of alert and intervention;

(c) description of mobilisable resources, internal or external;

(d) description of any technical and non-technical measures relevant for the reduction of the impact of a major accident.

ANNEX III

Information referred to in Article 8(5) and Article 10 on the safety management system and the organisation of the establishment with a view to the prevention of major accidents

For the purpose of implementing the operator's safety management system, account shall be taken of the following elements:

(a) the safety management system shall be proportionate to the hazards, industrial activities and complexity of the organisation in the establishment and be based on assessment of the risks; it should include the part of the general management system which includes the organisational structure, responsibilities, practices, procedures, processes and resources for determining and implementing the major-accident prevention policy (MAPP);

(b) the following issues shall be addressed by the safety management system:

(i) organisation and personnel — the roles and responsibilities of personnel involved in the management of major hazards at all levels in the organisation, together with the measures taken to raise awareness of the need for continuous improvement. The identification of training needs of such personnel and the provision of the training so identified. The involvement of employees and of subcontracted personnel working in the establishment which are important from the point of view of safety;

(ii) identification and evaluation of major hazards — adoption and implementation of procedures for systematically identifying major hazards arising from normal and abnormal operation including subcontracted activities where applicable and the assessment of their likelihood and severity;

(iii) operational control — adoption and implementation of procedures and instructions for safe operation, including maintenance, of plant, processes and equipment, and for alarm management and temporary stoppages; taking into account available information on best practices for monitoring and control, with a view to reducing the risk of system failure; management and control of the risks associated with ageing equipment installed in the establishment and corrosion; inventory of the establishment's equipment, strategy and methodology for monitoring and control of the condition of the equipment; appropriate follow-up actions and any necessary countermeasures;

(iv) management of change — adoption and implementation of procedures for planning modifications to, or the design of new installations, processes or storage facilities;

(v) planning for emergencies — adoption and implementation of procedures to identify foreseeable emergencies by systematic analysis, to prepare, test and review emergency plans to respond to such emergencies and to provide specific training for the staff concerned. Such training shall be given to all personnel working in the establishment, including relevant subcontracted personnel;

(vi) monitoring performance — adoption and implementation of procedures for the ongoing assessment of compliance with the objectives set by the operator's MAPP and safety management system, and the mechanisms for investigation and taking corrective action in case of non-compliance. The procedures shall cover the operator's system for reporting major accidents or 'near misses', particularly those involving failure of protective measures, and their investigation and follow-up on the basis of lessons learnt. The procedures could also include performance indicators such as safety performance indicators (SPIs) and/or other relevant indicators;

(vii) audit and review — adoption and implementation of procedures for periodic systematic assessment of the MAPP and the effectiveness and suitability of the safety management system; the documented review of performance of the policy and safety management system and its updating by senior management, including consideration and incorporation of necessary changes indicated by the audit and review.

ANNEX IV

Data and information to be included in the emergency plans referred to in Article 12

1. Internal emergency plans:

   (a) Names or positions of persons authorised to set emergency procedures in motion and the person in charge of and coordinating the on-site mitigatory action;

   (b) Name or position of the person with responsibility for liaising with the authority responsible for the external emergency plan;

   (c) For foreseeable conditions or events which could be significant in bringing about a major accident, a description of the action which should be taken to control the conditions or events and to limit their consequences, including a description of the safety equipment and the resources available;

   (d) Arrangements for limiting the risks to persons on site including how warnings are to be given and the actions persons are expected to take on receipt of a warning;

   (e) Arrangements for providing early warning of the incident to the authority responsible for setting the external emergency plan in motion, the type of information which should be contained in an initial warning and the arrangements for the provision of more detailed information as it becomes available;

   (f) where necessary, arrangements for training staff in the duties they will be expected to perform and, as appropriate, coordinating this with off-site emergency services;

   (g) Arrangements for providing assistance with off-site mitigatory action.

2. External emergency plans:

   (a) Names or positions of persons authorised to set emergency procedures in motion and of persons authorised to take charge of and coordinate off-site action;

   (b) Arrangements for receiving early warning of incidents, and alert and call-out procedures;

   (c) Arrangements for coordinating resources necessary to implement the external emergency plan;

   (d) Arrangements for providing assistance with on-site mitigatory action;

   (e) Arrangements for off-site mitigatory action, including responses to major-accident scenarios as set out in the safety report and considering possible domino effects, including those having an impact on the environment;

   (f) Arrangements for providing the public and any neighbouring establishments or sites that fall outside the scope of this Directive in accordance with Article 9 with specific information relating to the accident and the behaviour which should be adopted;

   (g) Arrangements for the provision of information to the emergency services of other Member States in the event of a major accident with possible transboundary consequences.

ANNEX V

Items of information to the public as provided for in Article 14(1) and in point (a) of Article 14(2)

PART 1

For all establishments covered by this Directive:

1. Name or trade name of the operator and the full address of the establishment concerned.

2. Confirmation that the establishment is subject to the regulations and/or administrative provisions implementing this Directive and that the notification referred to in Article 7(1) or the safety report referred to in Article 10(1) has been submitted to the competent authority.

3. An explanation in simple terms of the activity or activities undertaken at the establishment.

4. The common names or, in the case of dangerous substances covered by Part 1 of Annex I, the generic names or the hazard classification of the relevant dangerous substances involved at the establishment which could give rise to a major accident, with an indication of their principal dangerous characteristics in simple terms.

5. General information about how the public concerned will be warned, if necessary; adequate information about the appropriate behaviour in the event of a major accident or indication of where that information can be accessed electronically.

6. The date of the last site visit in accordance with Article 20(4), or reference to where that information can be accessed electronically; information on where more detailed information about the inspection and the related inspection plan can be obtained upon request, subject to the requirements of Article 22.

7. Details of where further relevant information can be obtained, subject to the requirements of Article 22.

PART 2

For upper-tier establishments, in addition to the information referred to in Part 1 of this Annex:

1. General information relating to the nature of the major-accident hazards, including their potential effects on human health and the environment and summary details of the main types of major-accident scenarios and the control measures to address them.

2. Confirmation that the operator is required to make adequate arrangements on site, in particular liaison with the emergency services, to deal with major accidents and to minimise their effects.

3. Appropriate information from the external emergency plan drawn up to cope with any off-site effects from an accident. This should include advice to cooperate with any instructions or requests from the emergency services at the time of an accident.

4. Where applicable, indication whether the establishment is close to the territory of another Member State with the possibility of a major accident with transboundary effects under the Convention of the United Nations Economic Commission for Europe on the Transboundary Effects of Industrial Accidents.

ANNEX VI

Criteria for the notification of a major accident to the Commission as provided for in Article 18(1)

I. Any major accident covered by paragraph 1 or having at least one of the consequences described in paragraphs 2, 3, 4 and 5 must be notified to the Commission.

1. Dangerous substances involved

Any fire or explosion or accidental discharge of a dangerous substance involving a quantity of at least 5 % of the qualifying quantity laid down in Column 3 of Part 1 or in Column 3 of Part 2 of Annex I.

2. Injury to persons and damage to real estate:

(a) a death;

(b) six persons injured within the establishment and hospitalised for at least 24 hours;

(c) one person outside the establishment hospitalised for at least 24 hours;

(d) dwelling(s) outside the establishment damaged and unusable as a result of the accident;

(e) the evacuation or confinement of persons for more than 2 hours (persons × hours): the value is at least 500;

(f) the interruption of drinking water, electricity, gas or telephone services for more than 2 hours (persons × hours): the value is at least 1 000.

3. Immediate damage to the environment:

(a) permanent or long-term damage to terrestrial habitats:

(i) 0,5 ha or more of a habitat of environmental or conservation importance protected by legislation;

(ii) 10 or more hectares of more widespread habitat, including agricultural land;

(b) significant or long-term damage to freshwater and marine habitats:

(i) 10 km or more of river or canal;

(ii) 1 ha or more of a lake or pond;

(iii) 2 ha or more of delta;

(iv) 2 ha or more of a coastline or open sea;

(c) significant damage to an aquifer or underground water:

1 ha or more.

4. Damage to property:

(a) damage to property in the establishment: at least EUR 2 000 000;

(b) damage to property outside the establishment: at least EUR 500 000.

5. Cross-border damage

Any major accident directly involving a dangerous substance giving rise to effects outside the territory of the Member State concerned.

II. Accidents or 'near misses' which Member States regard as being of particular technical interest for preventing major accidents and limiting their consequences and which do not meet the quantitative criteria above should be notified to the Commission.

ANNEX VII

CORRELATION TABLE

Directive 96/82/EC	This Directive
Article 1	Article 1
Article 2(1), first subparagraph	Article 2(1) and Article 3(2) and (3)
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Article 13(1), first subparagraph	Article 14(2), first subparagraph, point (a), and Article 14(2), second subparagraph, second sentence
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I

(Acts adopted under the EC Treaty/Euratom Treaty whose publication is obligatory)

DIRECTIVES

DIRECTIVE 2008/50/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 21 May 2008

on ambient air quality and cleaner air for Europe

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee [1],

Having regard to the opinion of the Committee of the Regions [2],

Acting in accordance with the procedure laid down in Article 251 of the Treaty [3],

Whereas:

(1) The Sixth Community Environment Action Programme adopted by Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 [4] establishes the need to reduce pollution to levels which minimise harmful effects on human health, paying particular attention to sensitive populations, and the environment as a whole, to improve the monitoring and assessment of air quality including the deposition of pollutants and to provide information to the public.

(2) In order to protect human health and the environment as a whole, it is particularly important to combat emissions of pollutants at source and to identify and implement the most effective emission reduction measures at local, national and Community level. Therefore, emissions of harmful air pollutants should be avoided, prevented or reduced and appropriate objectives set for ambient air quality taking into account relevant World Health Organisation standards, guidelines and programmes.

(3) Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management [5], Council Directive 1999/30/EC of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air [6], Directive 2000/69/EC of the European Parliament and of the Council of 16 November 2000 relating to limit values for benzene and carbon monoxide in ambient air [7], Directive 2002/3/EC of the European Parliament and of the Council of 12 February 2002 relating to ozone in ambient air [8] and Council Decision 97/101/EC of 27 January 1997 establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States [9] need to be substantially revised in order to incorporate the latest health and scientific developments and the experience of the Member States. In the interests of clarity, simplification and administrative efficiency it is therefore appropriate that those five acts be replaced by a single Directive and, where appropriate, by implementing measures.

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(1) OJ C 195, 18.8.2006, p. 84.

(2) OJ C 206, 29.8.2006, p. 1.

(3) Opinion of the European Parliament of 26 September 2006 (OJ C 306 E, 15.12.2006, p. 102), Council Common Position of 25 June 2007 (OJ C 236 E, 6.11.2007, p. 1) and Position of the European Parliament of 11 December 2007. Council Decision of 14 April 2008.

(4) OJ L 242, 10.9.2002, p. 1.

(5) OJ L 296, 21.11.1996, p. 55. Directive as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

(6) OJ L 163, 29.6.1999, p. 41. Directive as amended by Commission Decision 2001/744/EC (OJ L 278, 23.10.2001, p. 35).

(7) OJ L 313, 13.12.2000, p. 12.

(8) OJ L 67, 9.3.2002, p. 14.

(9) OJ L 35, 5.2.1997, p. 14. Decision as amended by Commission Decision 2001/752/EC (OJ L 282, 26.10.2001, p. 69).

(4) Once sufficient experience has been gained in relation to the implementation of Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air [1] consideration may be given to the possibility of merging its provisions with those of this Directive.

(5) A common approach to the assessment of ambient air quality should be followed according to common assessment criteria. When assessing ambient air quality, account should be taken of the size of populations and ecosystems exposed to air pollution. It is therefore appropriate to classify the territory of each Member State into zones or agglomerations reflecting the population density.

(6) Where possible modelling techniques should be applied to enable point data to be interpreted in terms of geographical distribution of concentration. This could serve as a basis for calculating the collective exposure of the population living in the area.

(7) In order to ensure that the information collected on air pollution is sufficiently representative and comparable across the Community, it is important that standardised measurement techniques and common criteria for the number and location of measuring stations are used for the assessment of ambient air quality. Techniques other than measurements can be used to assess ambient air quality and it is therefore necessary to define criteria for the use and required accuracy of such techniques.

(8) Detailed measurements of fine particulate matter at rural background locations should be made in order to understand better the impacts of this pollutant and to develop appropriate policies. Such measurements should be made in a manner consistent with those of the cooperative programme for monitoring and evaluation of the long range transmission of air pollutants in Europe (EMEP) set up under the 1979 Convention on Long-range Transboundary Air Pollution approved by Council Decision 81/462/EEC of 11 June 1981 [2].

(9) Air quality status should be maintained where it is already good, or improved. Where the objectives for ambient air quality laid down in this Directive are not met, Member States should take action in order to comply with the limit values and critical levels, and where possible, to attain the target values and long-term objectives.

(10) The risk posed by air pollution to vegetation and natural ecosystems is most important in places away from urban areas. The assessment of such risks and the compliance with critical levels for the protection of vegetation should therefore focus on places away from built-up areas.

(11) Fine particulate matter ($PM_{2,5}$) is responsible for significant negative impacts on human health. Further, there is as yet no identifiable threshold below which $PM_{2,5}$ would not pose a risk. As such, this pollutant should not be regulated in the same way as other air pollutants. The approach should aim at a general reduction of concentrations in the urban background to ensure that large sections of the population benefit from improved air quality. However, to ensure a minimum degree of health protection everywhere, that approach should be combined with a limit value, which is to be preceded in a first stage by a target value.

(12) The existing target values and long-term objectives of ensuring effective protection against harmful effects on human health and vegetation and ecosystems from exposure to ozone should remain unchanged. An alert threshold and an information threshold for ozone should be set for the protection of the general population and sensitive sections, respectively, from brief exposures to elevated ozone concentrations. Those thresholds should trigger the dissemination of information to the public on the risks of exposure and the implementation, if appropriate, of short-term measures to reduce ozone levels where the alert threshold is exceeded.

(13) Ozone is a transboundary pollutant formed in the atmosphere from the emission of primary pollutants addressed by Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants [3]. Progress towards the air quality targets and long term objectives for ozone set in this Directive should be determined by the targets and emission ceilings provided for in Directive 2001/81/EC and, if appropriate, by implementing air quality plans as provided for in this Directive.

(14) Fixed measurements should be mandatory in zones and agglomerations where the long-term objectives for ozone or the assessment thresholds for other pollutants are exceeded. Information from fixed measurements may be supplemented by modelling techniques and/or indicative measurements to enable point data to be interpreted in terms of geographical distribution of concentrations. The use of supplementary techniques of assessment should also allow for reduction of the required minimum number of fixed sampling points.

(15) Contributions from natural sources can be assessed but cannot be controlled. Therefore, where natural contributions to pollutants in ambient air can be determined with sufficient certainty, and where exceedances are due in whole or in part to these natural contributions, these may, under the conditions laid down in this Directive, be subtracted when assessing compliance with air quality limit values. Contributions to exceedances of particulate matter PM_{10} limit values attributable to winter-sanding or -salting of roads may also be subtracted when assessing compliance with air quality limit values provided that reasonable measures have been taken to lower concentrations.

[1] OJ L 23, 26.1.2005, p. 3.
[2] OJ L 171, 27.6.1981, p. 11.
[3] OJ L 309, 27.11.2001, p. 22. Directive as last amended by Council Directive 2006/105/EC (OJ L 363, 20.12.2006, p. 368).

(16) For zones and agglomerations where conditions are particularly difficult, it should be possible to postpone the deadline for compliance with the air quality limit values in cases where, notwithstanding the implementation of appropriate pollution abatement measures, acute compliance problems exist in specific zones and agglomerations. Any postponement for a given zone or agglomeration should be accompanied by a comprehensive plan to be assessed by the Commission to ensure compliance by the revised deadline. The availability of necessary Community measures reflecting the chosen ambition level in the Thematic Strategy on air pollution to reduce emissions at source will be important for an effective emission reduction by the timeframe established in this Directive for compliance with the limit values and should be taken into account when assessing requests to postpone deadlines for compliance.

(17) The necessary Community measures to reduce emissions at source, in particular measures to improve the effectiveness of Community legislation on industrial emissions, to limit the exhaust emissions of engines installed in heavy duty vehicles, to further reduce the Member States' permitted national emissions of key pollutants and the emissions associated with refuelling of petrol cars at service stations, and to address the sulphur content of fuels including marine fuels should be duly examined as a priority by all institutions involved.

(18) Air quality plans should be developed for zones and agglomerations within which concentrations of pollutants in ambient air exceed the relevant air quality target values or limit values, plus any temporary margins of tolerance, where applicable. Air pollutants are emitted from many different sources and activities. To ensure coherence between different policies, such air quality plans should where feasible be consistent, and integrated with plans and programmes prepared pursuant to Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants [1], Directive 2001/81/EC, and Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise [2]. Full account will also be taken of the ambient air quality objectives provided for in this Directive, where permits are granted for industrial activities pursuant to Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control [3].

(19) Action plans should be drawn up indicating the measures to be taken in the short term where there is a risk of an exceedance of one or more alert thresholds in order to reduce that risk and to limit its duration. When the risk applies to one or more limit values or target values, Member States may, where appropriate, draw up such short-term action plans. In respect of ozone, such short-term action plans should take into account the provisions of Commission Decision 2004/279/EC of 19 March 2004 concerning guidance for implementation of Directive 2002/3/EC of the European Parliament and of the Council relating to ozone in ambient air [4].

(20) Member States should consult with one another if, following significant pollution originating in another Member State, the level of a pollutant exceeds, or is likely to exceed, the relevant air quality objectives plus the margin of tolerance where applicable or, as the case may be, the alert threshold. The transboundary nature of specific pollutants, such as ozone and particulate matter, may require coordination between neighbouring Member States in drawing up and implementing air quality plans and short-term action plans and in informing the public. Where appropriate, Member States should pursue cooperation with third countries, with particular emphasis on the early involvement of candidate countries.

(21) It is necessary for the Member States and the Commission to collect, exchange and disseminate air quality information in order to understand better the impacts of air pollution and develop appropriate policies. Up-to-date information on concentrations of all regulated pollutants in ambient air should also be readily available to the public.

(22) In order to facilitate the handling and comparison of air quality information, data should be made available to the Commission in a standardised form.

(23) It is necessary to adapt procedures for data provision, assessment and reporting of air quality to enable electronic means and the Internet to be used as the main tools to make information available, and so that such procedures are compatible with Directive 2007/2/EC of the European Parliament and the Council of 14 March 2007 establishing an infrastructure for spatial information in the European Community (INSPIRE) [5].

(24) It is appropriate to provide for the possibility of adapting the criteria and techniques used for the assessment of the ambient air quality to scientific and technical progress and adapting thereto the information to be provided.

(25) Since the objectives of this Directive cannot be sufficiently achieved by the Member States by reason of the transboundary nature of air pollutants and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(1) OJ L 309, 27.11.2001, p. 1. Directive as last amended by Directive 2006/105/EC.

(2) OJ L 189, 18.7.2002, p. 12.

(3) OJ L 24, 29.1.2008, p. 8.

(4) OJ L 87, 25.3.2004, p. 50.

(5) OJ L 108, 25.4.2007, p. 1.

(26) Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. The penalties should be effective, proportionate and dissuasive.

(27) Certain provisions of the acts repealed by this Directive should remain in force in order to ensure the continuance of existing air quality limits for nitrogen dioxide until they are replaced from 1 January 2010, the continuance of air quality reporting provisions until new implementing measures are adopted, and the continuance of obligations relating to the preliminary assessments of air quality required under Directive 2004/107/EC.

(28) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive change as compared with the earlier Directives.

(29) In accordance with point 34 of the Interinstitutional Agreement on better lawmaking [1], Member States are encouraged to draw up, for themselves and in the interest of the Community, their own tables illustrating, as far as possible, the correlation between the Directive and the transposition measures, and to make them public.

(30) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union. In particular, this Directive seeks to promote the integration into the policies of the Union of a high level of environmental protection and the improvement of the quality of the environment in accordance with the principle of sustainable development as laid down in Article 37 of the Charter of Fundamental Rights of the European Union.

(31) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission [2].

(32) The Commission should be empowered to amend Annexes I to VI, Annexes VIII to X and Annex XV. Since those measures are of general scope and are designed to amend non-essential elements of this Directive, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC.

(33) The transposition clause requires Member States to ensure that the necessary urban background measurements are in place well in time to define the Average Exposure Indicator, in order to guarantee that the requirements related to the assessment of the National Exposure Reduction Target and to the calculation of the Average Exposure Indicator are met,

HAVE ADOPTED THIS DIRECTIVE:

CHAPTER I

GENERAL PROVISIONS

Article 1

Subject matter

This Directive lays down measures aimed at the following:

1. defining and establishing objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole;

2. assessing the ambient air quality in Member States on the basis of common methods and criteria;

3. obtaining information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and Community measures;

4. ensuring that such information on ambient air quality is made available to the public;

5. maintaining air quality where it is good and improving it in other cases;

6. promoting increased cooperation between the Member States in reducing air pollution.

Article 2

Definitions

For the purposes of this Directive:

1. 'ambient air' shall mean outdoor air in the troposphere, excluding workplaces as defined by Directive 89/654/EEC [3] where provisions concerning health and safety at work apply and to which members of the public do not have regular access;

2. 'pollutant' shall mean any substance present in ambient air and likely to have harmful effects on human health and/or the environment as a whole;

3. 'level' shall mean the concentration of a pollutant in ambient air or the deposition thereof on surfaces in a given time;

[1] OJ C 321, 31.12.2003, p. 1.

[2] OJ L 184, 17.7.1999, p. 23. Decision as amended by Decision 2006/512/EC (OJ L 200, 22.7.2006, p. 11).

[3] Council Directive 89/654/EEC of 30 November 1989 concerning the minimum safety and health requirements for the workplace (OJ L 393, 30.12.1989, p. 1). Directive as amended by Directive 2007/30/EC of the European Parliament and of the Council (OJ L 165, 27.6.2007, p. 21).

4. 'assessment' shall mean any method used to measure, calculate, predict or estimate levels;

5. 'limit value' shall mean a level fixed on the basis of scientific knowledge, with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained within a given period and not to be exceeded once attained;

6. 'critical level' shall mean a level fixed on the basis of scientific knowledge, above which direct adverse effects may occur on some receptors, such as trees, other plants or natural ecosystems but not on humans;

7. 'margin of tolerance' shall mean the percentage of the limit value by which that value may be exceeded subject to the conditions laid down in this Directive;

8. 'air quality plans' shall mean plans that set out measures in order to attain the limit values or target values;

9. 'target value' shall mean a level fixed with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained where possible over a given period;

10. 'alert threshold' shall mean a level beyond which there is a risk to human health from brief exposure for the population as a whole and at which immediate steps are to be taken by the Member States;

11. 'information threshold' shall mean a level beyond which there is a risk to human health from brief exposure for particularly sensitive sections of the population and for which immediate and appropriate information is necessary;

12. 'upper assessment threshold' shall mean a level below which a combination of fixed measurements and modelling techniques and/or indicative measurements may be used to assess ambient air quality;

13. 'lower assessment threshold' shall mean a level below which modelling or objective-estimation techniques alone may be used to assess ambient air quality;

14. 'long-term objective' shall mean a level to be attained in the long term, save where not achievable through proportionate measures, with the aim of providing effective protection of human health and the environment;

15. 'contributions from natural sources' shall mean emissions of pollutants not caused directly or indirectly by human activities, including natural events such as volcanic eruptions, seismic activities, geothermal activities, wild-land fires, high-wind events, sea sprays or the atmospheric re-suspension or transport of natural particles from dry regions;

16. 'zone' shall mean part of the territory of a Member State, as delimited by that Member State for the purposes of air quality assessment and management;

17. 'agglomeration' shall mean a zone that is a conurbation with a population in excess of 250 000 inhabitants or, where the population is 250 000 inhabitants or less, with a given population density per km^2 to be established by the Member States;

18. 'PM_{10}' shall mean particulate matter which passes through a size-selective inlet as defined in the reference method for the sampling and measurement of PM_{10}, EN 12341, with a 50 % efficiency cut-off at 10 μm aerodynamic diameter;

19. '$PM_{2,5}$' shall mean particulate matter which passes through a size-selective inlet as defined in the reference method for the sampling and measurement of $PM_{2,5}$, EN 14907, with a 50 % efficiency cut-off at 2,5 μm aerodynamic diameter;

20. 'average exposure indicator' shall mean an average level determined on the basis of measurements at urban background locations throughout the territory of a Member State and which reflects population exposure. It is used to calculate the national exposure reduction target and the exposure concentration obligation;

21. 'exposure concentration obligation' shall mean a level fixed on the basis of the average exposure indicator with the aim of reducing harmful effects on human health, to be attained over a given period;

22. 'national exposure reduction target' shall mean a percentage reduction of the average exposure of the population of a Member State set for the reference year with the aim of reducing harmful effects on human health, to be attained where possible over a given period;

23. 'urban background locations' shall mean places in urban areas where levels are representative of the exposure of the general urban population;

24. 'oxides of nitrogen' shall mean the sum of the volume mixing ratio (ppbv) of nitrogen monoxide (nitric oxide) and nitrogen dioxide expressed in units of mass concentration of nitrogen dioxide (μg/m^3);

25. 'fixed measurements' shall mean measurements taken at fixed sites, either continuously or by random sampling, to determine the levels in accordance with the relevant data quality objectives;

26. 'indicative measurements' shall mean measurements which meet data quality objectives that are less strict than those required for fixed measurements;

27. 'volatile organic compounds' (VOC) shall mean organic compounds from anthropogenic and biogenic sources, other than methane, that are capable of producing photochemical oxidants by reactions with nitrogen oxides in the presence of sunlight;

28. 'ozone precursor substances' means substances which contribute to the formation of ground-level ozone, some of which are listed in Annex X.

Article 3

Responsibilities

Member States shall designate at the appropriate levels the competent authorities and bodies responsible for the following:

(a) assessment of ambient air quality;

(b) approval of measurement systems (methods, equipment, networks and laboratories);

(c) ensuring the accuracy of measurements;

(d) analysis of assessment methods;

(e) coordination on their territory if Community-wide quality assurance programmes are being organised by the Commission;

(f) cooperation with the other Member States and the Commission.

Where relevant, the competent authorities and bodies shall comply with Section C of Annex I.

Article 4

Establishment of zones and agglomerations

Member States shall establish zones and agglomerations throughout their territory. Air quality assessment and air quality management shall be carried out in all zones and agglomerations.

CHAPTER II

ASSESSMENT OF AMBIENT AIR QUALITY

SECTION 1

Assessment of ambient air quality in relation to sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter, lead, benzene and carbon monoxide

Article 5

Assessment regime

1. The upper and lower assessment thresholds specified in Section A of Annex II shall apply to sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10} and $PM_{2,5}$), lead, benzene and carbon monoxide.

Each zone and agglomeration shall be classified in relation to those assessment thresholds.

2. The classification referred to in paragraph 1 shall be reviewed at least every five years in accordance with the procedure laid down in Section B of Annex II.

However, classifications shall be reviewed more frequently in the event of significant changes in activities relevant to the ambient concentrations of sulphur dioxide, nitrogen dioxide or, where relevant, oxides of nitrogen, particulate matter (PM_{10}, $PM_{2,5}$), lead, benzene or carbon monoxide.

Article 6

Assessment criteria

1. Member States shall assess ambient air quality with respect to the pollutants referred to in Article 5 in all their zones and agglomerations, in accordance with the criteria laid down in paragraphs 2, 3 and 4 of this Article and in accordance with the criteria laid down in Annex III.

2. In all zones and agglomerations where the level of pollutants referred to in paragraph 1 exceeds the upper assessment threshold established for those pollutants, fixed measurements shall be used to assess the ambient air quality. Those fixed measurements may be supplemented by modelling techniques and/or indicative measurements to provide adequate information on the spatial distribution of the ambient air quality.

3. In all zones and agglomerations where the level of pollutants referred to in paragraph 1 is below the upper assessment threshold established for those pollutants, a combination of fixed measurements and modelling techniques and/or indicative measurements may be used to assess the ambient air quality.

4. In all zones and agglomerations where the level of pollutants referred to in paragraph 1 is below the lower assessment threshold established for those pollutants, modelling techniques or objective-estimation techniques or both shall be sufficient for the assessment of the ambient air quality.

5. In addition to the assessments referred to in paragraphs 2, 3 and 4, measurements shall be made, at rural background locations away from significant sources of air pollution, for the purposes of providing, as a minimum, information on the total mass concentration and the chemical speciation concentrations of fine particulate matter ($PM_{2,5}$) on an annual average basis and shall be conducted using the following criteria:

(a) one sampling point shall be installed every 100 000 km^2;

(b) each Member State shall set up at least one measuring station or may, by agreement with adjoining Member States, set up one or several common measuring stations, covering the relevant neighbouring zones, to achieve the necessary spatial resolution;

(c) where appropriate, monitoring shall be coordinated with the monitoring strategy and measurement programme of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP);

(d) Sections A and C of Annex I shall apply in relation to the data quality objectives for mass concentration measurements of particulate matter and Annex IV shall apply in its entirety.

Member States shall inform the Commission of the measurement methods used in the measurement of the chemical composition of fine particulate matter ($PM_{2,5}$).

Article 7

Sampling points

1. The location of sampling points for the measurement of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10}, $PM_{2,5}$), lead, benzene and carbon monoxide in ambient air shall be determined using the criteria listed in Annex III.

2. In each zone or agglomeration where fixed measurements are the sole source of information for assessing air quality, the number of sampling points for each relevant pollutant shall not be less than the minimum number of sampling points specified in Section A of Annex V.

3. For zones and agglomerations within which information from fixed measurement sampling points is supplemented by information from modelling and/or indicative measurement, the total number of sampling points specified in Section A of Annex V may be reduced by up to 50 %, provided that the following conditions are met:

(a) the supplementary methods provide sufficient information for the assessment of air quality with regard to limit values or alert thresholds, as well as adequate information for the public;

(b) the number of sampling points to be installed and the spatial resolution of other techniques are sufficient for the concentration of the relevant pollutant to be established in accordance with the data quality objectives specified in Section A of Annex I and enable assessment results to meet the criteria specified in Section B of Annex I.

The results of modelling and/or indicative measurement shall be taken into account for the assessment of air quality with respect to the limit values.

4. The application in Member States of the criteria for selecting sampling points shall be monitored by the Commission so as to facilitate the harmonised application of those criteria throughout the European Union.

Article 8

Reference measurement methods

1. Member States shall apply the reference measurement methods and criteria specified in Section A and Section C of Annex VI.

2. Other measurement methods may be used subject to the conditions set out in Section B of Annex VI.

SECTION 2

Assessment of ambient air quality in relation to ozone

Article 9

Assessment criteria

1. Where, in a zone or agglomeration, concentrations of ozone have exceeded the long-term objectives specified in Section C of Annex VII during any of the previous five years of measurement, fixed measurements shall be taken.

2. Where fewer than five years' data are available, Member States may, for the purposes of determining whether the long-term objectives referred to in paragraph 1 have been exceeded during those five years, combine the results from measurement campaigns of short duration carried out when and where levels are likely to be at their highest, with the results obtained from emission inventories and modelling.

Article 10

Sampling points

1. The siting of sampling points for the measurement of ozone shall be determined using the criteria set out in Annex VIII.

2. The sampling points for fixed measurements of ozone in each zone or agglomeration within which measurement is the sole source of information for assessing air quality shall not be less than the minimum number of sampling points specified in Section A of Annex IX.

3. For zones and agglomerations within which information from sampling points for fixed measurements is supplemented by information from modelling and/or indicative measurements, the number of sampling points specified in Section A of Annex IX may be reduced provided that the following conditions are met:

(a) the supplementary methods provide sufficient information for the assessment of air quality with regard to target values, long-term objectives, information and alert thresholds;

(b) the number of sampling points to be installed and the spatial resolution of other techniques are sufficient for the concentration of ozone to be established in accordance with the data quality objectives specified in Section A of Annex I and enable assessment results to meet the criteria specified in Section B of Annex I;

(c) the number of sampling points in each zone or agglomeration amounts to at least one sampling point per two million inhabitants or one sampling point per 50 000 km^2, whichever produces the greater number of sampling points, but must not be less than one sampling point in each zone or agglomeration;

(d) nitrogen dioxide is measured at all remaining sampling points except at rural background stations as referred to in Section A of Annex VIII.

The results of modelling and/or indicative measurement shall be taken into account for the assessment of air quality with respect to the target values.

4. Nitrogen dioxide shall be measured at a minimum of 50 % of the ozone sampling points required under Section A of Annex IX. That measurement shall be continuous except at rural background stations, as referred to in Section A of Annex VIII, where other measurement methods may be used.

5. In zones and agglomerations where, during each of the previous five years of measurement, concentrations are below the long-term objectives, the number of sampling points for fixed measurements shall be determined in accordance with Section B of Annex IX.

6. Each Member State shall ensure that at least one sampling point is installed and operated in its territory to supply data on concentrations of the ozone precursor substances listed in Annex X. Each Member State shall choose the number and siting of the stations at which ozone precursor substances are to be measured, taking into account the objectives and methods laid down in Annex X.

Article 11

Reference measurement methods

1. Member States shall apply the reference method for measurement of ozone, set out in point 8 of Section A of Annex VI. Other measuring methods may be used subject to the conditions set out in Section B of Annex VI.

2. Each Member State shall inform the Commission of the methods it uses to sample and measure VOC, as listed in Annex X.

CHAPTER III

AMBIENT AIR QUALITY MANAGEMENT

Article 12

Requirements where levels are lower than the limit values

In zones and agglomerations where the levels of sulphur dioxide, nitrogen dioxide, PM_{10}, $PM_{2,5}$, lead, benzene and carbon monoxide in ambient air are below the respective limit values specified in Annexes XI and XIV, Member States shall maintain the levels of those pollutants below the limit values and shall endeavour to preserve the best ambient air quality, compatible with sustainable development.

Article 13

Limit values and alert thresholds for the protection of human health

1. Member States shall ensure that, throughout their zones and agglomerations, levels of sulphur dioxide, PM_{10}, lead, and carbon monoxide in ambient air do not exceed the limit values laid down in Annex XI.

In respect of nitrogen dioxide and benzene, the limit values specified in Annex XI may not be exceeded from the dates specified therein.

Compliance with these requirements shall be assessed in accordance with Annex III.

The margins of tolerance laid down in Annex XI shall apply in accordance with Article 22(3) and Article 23(1).

2. The alert thresholds for concentrations of sulphur dioxide and nitrogen dioxide in ambient air shall be those laid down in Section A of Annex XII.

Article 14

Critical levels

1. Member States shall ensure compliance with the critical levels specified in Annex XIII as assessed in accordance with Section A of Annex III.

2. Where fixed measurements are the sole source of information for assessing air quality, the number of sampling points shall not be less than the minimum number specified in Section C of Annex V. Where that information is supplemented by indicative measurements or modelling, the minimum number of sampling points may be reduced by up to 50 % so long as the assessed concentrations of the relevant pollutant can be established in accordance with the data quality objectives specified in Section A of Annex I.

Article 15

National $PM_{2,5}$ exposure reduction target for the protection of human health

1. Member States shall take all necessary measures not entailing disproportionate costs to reduce exposure to $PM_{2,5}$ with a view to attaining the national exposure reduction target laid down in Section B of Annex XIV by the year specified therein.

2. Member States shall ensure that the average exposure indicator for the year 2015 established in accordance with Section A of Annex XIV does not exceed the exposure concentration obligation laid down in Section C of that Annex.

3. The average exposure indicator for $PM_{2,5}$ shall be assessed in accordance with Section A of Annex XIV.

4. Each Member State shall, in accordance with Annex III, ensure that the distribution and the number of sampling points on which the average exposure indicator for $PM_{2,5}$ is based reflect the general population exposure adequately. The number of sampling points shall be no less than that determined by application of Section B of Annex V.

Article 16

$PM_{2,5}$ target value and limit value for the protection of human health

1. Member States shall take all necessary measures not entailing disproportionate costs to ensure that concentrations of $PM_{2,5}$ in ambient air do not exceed the target value laid down in Section D of Annex XIV as from the date specified therein.

2. Member States shall ensure that concentrations of $PM_{2,5}$ in ambient air do not exceed the limit value laid down in Section E of Annex XIV throughout their zones and agglomerations as from the date specified therein. Compliance with this requirement shall be assessed in accordance with Annex III.

3. The margin of tolerance laid down in Section E of Annex XIV shall apply in accordance with Article 23(1).

Article 17

Requirements in zones and agglomerations where ozone concentrations exceed the target values and long-term objectives

1. Member States shall take all necessary measures not entailing disproportionate costs to ensure that the target values and long-term objectives are attained.

2. For zones and agglomerations in which a target value is exceeded, Member States shall ensure that the programme prepared pursuant to Article 6 of Directive 2001/81/EC and, if appropriate, an air quality plan is implemented in order to attain the target values, save where not achievable through measures not entailing disproportionate costs, as from the date specified in Section B of Annex VII to this Directive.

3. For zones and agglomerations in which the levels of ozone in ambient air are higher than the long-term objectives but below, or equal to, the target values, Member States shall prepare and implement cost-effective measures with the aim of achieving the long-term objectives. Those measures shall, at least, be consistent with all the air quality plans and the programme referred to in paragraph 2.

Article 18

Requirements in zones and agglomerations where ozone concentrations meet the long-term objectives

In zones and agglomerations in which ozone levels meet the long-term objectives, Member States shall, in so far as factors including the transboundary nature of ozone pollution and meteorological conditions permit, maintain those levels below the long-term objectives and shall preserve through proportionate measures the best ambient air quality compatible with sustainable development and a high level of environmental and human health protection.

Article 19

Measures required in the event of information or alert thresholds being exceeded

Where the information threshold specified in Annex XII or any of the alert thresholds laid down therein is exceeded, Member States shall take the necessary steps to inform the public by means of radio, television, newspapers or the Internet.

Member States shall also forward to the Commission, on a provisional basis, information concerning the levels recorded and the duration of the periods during which the alert threshold or information threshold was exceeded.

Article 20

Contributions from natural sources

1. Member States shall transmit to the Commission, for a given year, lists of zones and agglomerations where exceedances of limit values for a given pollutant are attributable to natural sources. Member States shall provide information on concentrations and sources and the evidence demonstrating that the exceedances are attributable to natural sources.

2. Where the Commission has been informed of an exceedance attributable to natural sources in accordance with paragraph 1, that exceedance shall not be considered as an exceedance for the purposes of this Directive.

3. The Commission shall by 11 June 2010 publish guidelines for demonstration and subtraction of exceedances attributable to natural sources.

Article 21

Exceedances attributable to winter-sanding or -salting of roads

1. Member States may designate zones or agglomerations within which limit values for PM_{10} are exceeded in ambient air due to the re-suspension of particulates following winter-sanding or -salting of roads.

2. Member States shall send the Commission lists of any such zones or agglomerations together with information on concentrations and sources of PM_{10} therein.

3. When informing the Commission in accordance with Article 27, Member States shall provide the necessary evidence to demonstrate that any exceedances are due to re-suspended particulates and that reasonable measures have been taken to lower the concentrations.

4. Without prejudice to Article 20, in the case of zones and agglomerations referred to in paragraph 1 of this Article, Member States need to establish the air quality plan provided for in Article 23 only in so far as exceedances are attributable to PM_{10} sources other than winter-sanding or -salting of roads.

5. The Commission shall by 11 June 2010 publish guidelines for determination of contributions from the re-suspension of particulates following winter-sanding or -salting of roads.

Article 22

Postponement of attainment deadlines and exemption from the obligation to apply certain limit values

1. Where, in a given zone or agglomeration, conformity with the limit values for nitrogen dioxide or benzene cannot be achieved by the deadlines specified in Annex XI, a Member State may postpone those deadlines by a maximum of five years for that particular zone or agglomeration, on condition that an air quality plan is established in accordance with Article 23 for the zone or agglomeration to which the postponement would apply; such air quality plan shall be supplemented by the information listed in Section B of Annex XV related to the pollutants concerned and shall demonstrate how conformity will be achieved with the limit values before the new deadline.

2. Where, in a given zone or agglomeration, conformity with the limit values for PM_{10} as specified in Annex XI cannot be achieved because of site-specific dispersion characteristics, adverse climatic conditions or transboundary contributions, a Member State shall be exempt from the obligation to apply those limit values until 11 June 2011 provided that the conditions laid down in paragraph 1 are fulfilled and that the Member State shows that all appropriate measures have been taken at national, regional and local level to meet the deadlines.

3. Where a Member State applies paragraphs 1 or 2, it shall ensure that the limit value for each pollutant is not exceeded by more than the maximum margin of tolerance specified in Annex XI for each of the pollutants concerned.

4. Member States shall notify the Commission where, in their view, paragraphs 1 or 2 are applicable, and shall communicate the air quality plan referred to in paragraph 1 including all relevant information necessary for the Commission to assess whether or not the relevant conditions are satisfied. In its assessment, the Commission shall take into account estimated effects on ambient air quality in the Member States, at present and in the future, of measures that have been taken by the Member States as well as estimated effects on ambient air quality of current Community measures and planned Community measures to be proposed by the Commission.

Where the Commission has raised no objections within nine months of receipt of that notification, the relevant conditions for the application of paragraphs 1 or 2 shall be deemed to be satisfied.

If objections are raised, the Commission may require Member States to adjust or provide new air quality plans.

CHAPTER IV

PLANS

Article 23

Air quality plans

1. Where, in given zones or agglomerations, the levels of pollutants in ambient air exceed any limit value or target value, plus any relevant margin of tolerance in each case, Member States shall ensure that air quality plans are established for those zones and agglomerations in order to achieve the related limit value or target value specified in Annexes XI and XIV.

In the event of exceedances of those limit values for which the attainment deadline is already expired, the air quality plans shall set out appropriate measures, so that the exceedance period can be kept as short as possible. The air quality plans may additionally include specific measures aiming at the protection of sensitive population groups, including children.

Those air quality plans shall incorporate at least the information listed in Section A of Annex XV and may include measures pursuant to Article 24. Those plans shall be communicated to the Commission without delay, but no later than two years after the end of the year the first exceedance was observed.

Where air quality plans must be prepared or implemented in respect of several pollutants, Member States shall, where appropriate, prepare and implement integrated air quality plans covering all pollutants concerned.

2. Member States shall, to the extent feasible, ensure consistency with other plans required under Directive 2001/80/EC, Directive 2001/81/EC or Directive 2002/49/EC in order to achieve the relevant environmental objectives.

Article 24

Short-term action plans

1. Where, in a given zone or agglomeration, there is a risk that the levels of pollutants will exceed one or more of the alert thresholds specified in Annex XII, Member States shall draw up action plans indicating the measures to be taken in the short term in order to reduce the risk or duration of such an exceedance. Where this risk applies to one or more limit values or target values specified in Annexes VII, XI and XIV, Member States may, where appropriate, draw up such short-term action plans.

However, where there is a risk that the alert threshold for ozone specified in Section B of Annex XII will be exceeded, Member States shall only draw up such short-term action plans when in their opinion there is a significant potential, taking into account national geographical, meteorological and economic conditions, to reduce the risk, duration or severity of such an exceedance. When drawing up such a short-term action plan Member States shall take account of Decision 2004/279/EC.

2. The short-term action plans referred to in paragraph 1 may, depending on the individual case, provide for effective measures to control and, where necessary, suspend activities which contribute to the risk of the respective limit values or target values or alert threshold being exceeded. Those action plans may include measures in relation to motor-vehicle traffic, construction works, ships at berth, and the use of industrial plants or products and domestic heating. Specific actions aiming at the protection of sensitive population groups, including children, may also be considered in the framework of those plans.

3. When Member States have drawn up a short-term action plan, they shall make available to the public and to appropriate organisations such as environmental organisations, consumer organisations, organisations representing the interests of sensitive population groups, other relevant health-care bodies and the relevant industrial federations both the results of their investigations on the feasibility and the content of specific short-term action plans as well as information on the implementation of these plans.

4. For the first time before 11 June 2010 and at regular intervals thereafter, the Commission shall publish examples of best practices for the drawing-up of short-term action plans, including examples of best practices for the protection of sensitive population groups, including children.

Article 25

Transboundary air pollution

1. Where any alert threshold, limit value or target value plus any relevant margin of tolerance or long-term objective is exceeded due to significant transboundary transport of air pollutants or their precursors, the Member States concerned shall cooperate and, where appropriate, draw up joint activities, such as the preparation of joint or coordinated air quality plans pursuant to Article 23 in order to remove such exceedances through the application of appropriate but proportionate measures.

2. The Commission shall be invited to be present and to assist in any cooperation referred to in paragraph 1. Where appropriate, the Commission shall, taking into account the reports established pursuant to Article 9 of Directive 2001/81/EC, consider whether further action should be taken at Community level in order to reduce precursor emissions responsible for transboundary pollution.

3. Member States shall, if appropriate pursuant to Article 24, prepare and implement joint short-term action plans covering neighbouring zones in other Member States. Member States shall ensure that neighbouring zones in other Member States which have developed short-term action plans receive all appropriate information.

4. Where the information threshold or alert thresholds are exceeded in zones or agglomerations close to national borders, information shall be provided as soon as possible to the competent authorities in the neighbouring Member States concerned. That information shall also be made available to the public.

5. In drawing up plans as provided for in paragraphs 1 and 3 and in informing the public as referred to in paragraph 4, Member States shall, where appropriate, endeavour to pursue cooperation with third countries, and in particular with candidate countries.

CHAPTER V

INFORMATION AND REPORTING

Article 26

Public information

1. Member States shall ensure that the public as well as appropriate organisations such as environmental organisations, consumer organisations, organisations representing the interests of sensitive populations, other relevant health-care bodies and the relevant industrial federations are informed, adequately and in good time, of the following:

(a) ambient air quality in accordance with Annex XVI;

(b) any postponement decisions pursuant to Article 22(1);

(c) any exemptions pursuant to Article 22(2);

(d) air quality plans as provided for in Article 22(1) and Article 23 and programmes referred to in Article 17(2).

The information shall be made available free of charge by means of any easily accessible media including the Internet or any other appropriate means of telecommunication, and shall take into account the provisions laid down in Directive 2007/2/EC.

2. Member States shall make available to the public annual reports for all pollutants covered by this Directive.

Those reports shall summarise the levels exceeding limit values, target values, long-term objectives, information thresholds and alert thresholds, for the relevant averaging periods. That information shall be combined with a summary assessment of the effects of those exceedances. The reports may include, where appropriate, further information and assessments on forest protection as well as information on other pollutants for which monitoring provisions are specified in this Directive, such as, *inter alia*, selected non-regulated ozone precursor substances as listed in Section B of Annex X.

3. Member States shall inform the public of the competent authority or body designated in relation to the tasks referred to in Article 3.

Article 27

Transmission of information and reporting

1. Member States shall ensure that information on ambient air quality is made available to the Commission within the required timescale as determined by the implementing measures referred to in Article 28(2).

2. In any event, for the specific purpose of assessing compliance with the limit values and critical levels and the attainment of target values, such information shall be made available to the Commission no later than nine months after the end of each year and shall include:

(a) the changes made in that year to the list and delimitation of zones and agglomerations established under Article 4;

(b) the list of zones and agglomerations in which the levels of one or more pollutants are higher than the limit values plus the margin of tolerance where applicable or higher than target values or critical levels; and for these zones and agglomerations:

(i) levels assessed and, if relevant, the dates and periods when such levels were observed;

(ii) if appropriate, an assessment on contributions from natural sources and from re-suspension of particulates following winter-sanding or -salting of roads to the levels assessed, as declared to the Commission under Articles 20 and 21.

3. Paragraphs 1 and 2 shall apply to information collected as from the beginning of the second calendar year after the entry into force of the implementing measures referred to in Article 28(2).

Article 28

Implementing measures

1. Measures designed to amend the non-essential elements of this Directive, namely Annexes I to VI, Annexes VIII to X and Annex XV, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 29(3).

However, the amendments may not have the effect of directly or indirectly modifying either of the following:

(a) the limit values, exposure reduction targets, critical levels, target values, information or alert thresholds or long-term objectives specified in Annex VII and Annexes XI to XIV;

(b) the dates for compliance with any of the parameters referred to in point (a).

2. The Commission shall, in accordance with the regulatory procedure referred to in Article 29(2), determine the additional information to be made available by Member States pursuant to Article 27 as well as the timescales in which such information is to be communicated.

The Commission shall also identify ways of streamlining the way data are reported and the reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States, in accordance with the regulatory procedure referred to in Article 29(2).

3. The Commission shall draw up guidelines for the agreements on setting up common measuring stations as referred to in Article 6(5).

4. The Commission shall publish guidance on the demonstration of equivalence referred to in Section B of Annex VI.

CHAPTER VI

COMMITTEE, TRANSITIONAL AND FINAL PROVISIONS

Article 29

Committee

1. The Commission shall be assisted by a committee, 'the Ambient Air Quality Committee'.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

Article 30

Penalties

Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.

Article 31

Repeal and transitional provisions

1. Directives 96/62/EC, 1999/30/EC, 2000/69/EC and 2002/3/EC shall be repealed as from 11 June 2010, without prejudice to the obligations on the Member States relating to time-limits for transposition or application of those Directives.

However, from 11 June 2008, the following shall apply:

(a) in Directive 96/62/EC, paragraph 1 of Article 12 shall be replaced by the following:

'1. The detailed arrangements for forwarding the information to be provided under Article 11 shall be adopted in accordance with the procedure referred to in paragraph 3.';

(b) in Directive 1999/30/EC, Article 7(7), footnote 1 in point I of Annex VIII and point VI of Annex IX shall be deleted;

(c) in Directive 2000/69/EC, Article 5(7) and point III in Annex VII shall be deleted;

(d) in Directive 2002/3/EC, Article 9(5) and point II of Annex VIII shall be deleted.

2. Notwithstanding the first subparagraph of paragraph 1, the following Articles shall remain in force:

(a) Article 5 of Directive 96/62/EC until 31 December 2010;

(b) Article 11(1) of Directive 96/62/EC and Article 10(1), (2) and (3) of Directive 2002/3/EC until the end of the second calendar year following the entry into force of the implementing measures referred to in Article 28(2) of this Directive;

(c) Article 9(3) and (4) of Directive 1999/30/EC until 31 December 2009.

3. References made to the repealed Directives shall be construed as being made to this Directive and should be read in accordance with the correlation table in Annex XVII.

4. Decision 97/101/EC shall be repealed with effect from the end of the second calendar year following the entry into force of the implementing measures referred to in Article 28(2) of this Directive.

However, the third, fourth and fifth indents of Article 7 of Decision 97/101/EC shall be deleted with effect from 11 June 2008.

Article 32

Review

1. In 2013 the Commission shall review the provisions related to $PM_{2,5}$ and, as appropriate, other pollutants, and shall present a proposal to the European Parliament and the Council.

As regards $PM_{2,5}$, the review shall be undertaken with a view to establishing a legally binding national exposure reduction obligation in order to replace the national exposure reduction target and to review the exposure concentration obligation laid down in Article 15, taking into account, *inter alia*, the following elements:

— latest scientific information from WHO and other relevant organisations,

— air quality situations and reduction potentials in the Member States,

— the revision of Directive 2001/81/EC,

— progress made in implementing Community reduction measures for air pollutants,

2. The Commission shall take into account the feasibility of adopting a more ambitious limit value for $PM_{2,5}$, shall review the indicative limit value of the second stage for $PM_{2,5}$ and consider confirming or altering that value.

3. As part of the review, the Commission shall also prepare a report on the experience and on the necessity of monitoring of PM_{10} and $PM_{2,5}$, taking into account technical progress in automatic measuring techniques. If appropriate, new reference methods for the measurement of PM_{10} and $PM_{2,5}$ shall be proposed.

Article 33

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 11 June 2010. They shall forthwith communicate to the Commission the text of those measures.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. However, Member States shall ensure that a sufficient number of urban background measurement stations of $PM_{2,5}$ necessary for the calculation of the Average Exposure Indicator, in accordance with Section B of Annex V, is established at the latest by 1 January 2009, in order to comply with the timeframe and the conditions indicated in Section A of Annex XIV.

3. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 34

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

Article 35

Addressees

This Directive is addressed to the Member States.

Done at Strasbourg, 21 May 2008.

For the European Parliament	*For the Council*
The President	*The President*
H.-G. PÖTTERING	J. LENARČIČ

ANNEX I

DATA QUALITY OBJECTIVES

A. Data quality objectives for ambient air quality assessment

	Sulphur dioxide, nitrogen dioxide and oxides of nitrogen and carbon monoxide	Benzene	Particulate matter (PM_{10}/$PM_{2,5}$) and lead	Ozone and related NO and NO_2
Fixed measurements (1)				
Uncertainty	15 %	25 %	25 %	15 %
Minimum data capture	90 %	90 %	90 %	90 % during summer 75 % during winter
Minimum time coverage:				
— urban background and traffic	—	35 % (2)	—	—
— industrial sites	—	90 %	—	—
Indicative measurements				
Uncertainty	25 %	30 %	50 %	30 %
Minimum data capture	90 %	90 %	90 %	90 %
Minimum time coverage	14 % (4)	14 % (3)	14 % (4)	> 10 % during summer
Modelling uncertainty:				
Hourly	50 %	—	—	50 %
Eight-hour averages	50 %	—	—	50 %
Daily averages	50 %	—	not yet defined	—
Annual averages	30 %	50 %	50 %	—
Objective estimation Uncertainty	75 %	100 %	100 %	75 %

(1) Member States may apply random measurements instead of continuous measurements for benzene, lead and particulate matter if they can demonstrate to the Commission that the uncertainty, including the uncertainty due to random sampling, meets the quality objective of 25 % and the time coverage is still larger than the minimum time coverage for indicative measurements. Random sampling must be evenly distributed over the year in order to avoid skewing of results. The uncertainty due to random sampling may be determined by the procedure laid down in ISO 11222 (2002) 'Air Quality — Determination of the Uncertainty of the Time Average of Air Quality Measurements'. If random measurements are used to assess the requirements of the PM_{10} limit value, the 90,4 percentile (to be lower than or equal to 50 $\mu g/m^3$) should be evaluated instead of the number of exceedances, which is highly influenced by data coverage.

(2) Distributed over the year to be representative of various conditions for climate and traffic.

(3) One day's measurement a week at random, evenly distributed over the year, or eight weeks evenly distributed over the year.

(4) One measurement a week at random, evenly distributed over the year, or eight weeks evenly distributed over the year.

The uncertainty (expressed at a 95 % confidence level) of the assessment methods will be evaluated in accordance with the principles of the CEN Guide to the Expression of Uncertainty in Measurement (ENV 13005-1999), the methodology of ISO 5725:1994 and the guidance provided in the CEN report 'Air Quality — Approach to Uncertainty Estimation for Ambient Air Reference Measurement Methods' (CR 14377:2002E). The percentages for uncertainty in the above table are given for individual measurements averaged over the period considered by the limit value (or target value in the case of ozone), for a 95 % confidence interval. The uncertainty for the fixed measurements shall be interpreted as being applicable in the region of the appropriate limit value (or target value in the case of ozone).

The uncertainty for modelling is defined as the maximum deviation of the measured and calculated concentration levels for 90 % of individual monitoring points, over the period considered, by the limit value (or target value in the case of ozone), without taking into account the timing of the events. The uncertainty for modelling shall be interpreted as being applicable in the region of the appropriate limit value (or target value in the case of ozone). The fixed measurements that have to be selected for comparison with modelling results shall be representative of the scale covered by the model.

The uncertainty for objective estimation is defined as the maximum deviation of the measured and calculated concentration levels, over the period considered, by the limit value (or target value in the case of ozone), without taking into account the timing of the events.

The requirements for minimum data capture and time coverage do not include losses of data due to the regular calibration or the normal maintenance of the instrumentation.

B. **Results of air quality assessment**

The following information shall be compiled for zones or agglomerations within which sources other than measurement are employed to supplement information from measurement or as the sole means of air quality assessment:

— a description of assessment activities carried out,

— the specific methods used, with references to descriptions of the method,

— the sources of data and information,

— a description of results, including uncertainties and, in particular, the extent of any area or, if relevant, the length of road within the zone or agglomeration over which concentrations exceed any limit value, target value or long-term objective plus margin of tolerance, if applicable, and of any area within which concentrations exceed the upper assessment threshold or the lower assessment threshold,

— the population potentially exposed to levels in excess of any limit value for protection of human health.

C. **Quality assurance for ambient air quality assessment: data validation**

1. To ensure accuracy of measurements and compliance with the data quality objectives laid down in Section A, the appropriate competent authorities and bodies designated pursuant to Article 3 shall ensure the following:

   — that all measurements undertaken in relation to the assessment of ambient air quality pursuant to Articles 6 and 9 are traceable in accordance with the requirements set out in Section 5.6.2.2 of the ISO/IEC 17025:2005,

   — that institutions operating networks and individual stations have an established quality assurance and quality control system which provides for regular maintenance to assure the accuracy of measuring devices,

   — that a quality assurance/quality control process is established for the process of data collection and reporting and that institutions appointed for this task actively participate in the related Community-wide quality assurance programmes,

   — that the national laboratories, when appointed by the appropriate competent authority or body designated pursuant to Article 3, that are taking part in Community-wide intercomparisons covering pollutants regulated in this Directive, are accredited according to EN/ISO 17025 by 2010 for the reference methods referred to in Annex VI. These laboratories shall be involved in the coordination on Member States territory of the Community wide quality assurance programmes to be organised by the Commission and shall also coordinate, on the national level, the appropriate realisation of reference methods and the demonstration of equivalence of non-reference methods.

2. All reported data under Article 27 shall be deemed to be valid except data flagged as provisional.

ANNEX II

Determination of requirements for assessment of concentrations of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10} and $PM_{2,5}$), lead, benzene and carbon monoxide in ambient air within a zone or agglomeration

A. **Upper and lower assessment thresholds**

The following upper and lower assessment thresholds will apply:

1. *Sulphur dioxide*

	Health protection	Vegetation protection
Upper assessment threshold	60 % of 24-hour limit value (75 µg/m³, not to be exceeded more than 3 times in any calendar year)	60 % of winter critical level (12 µg/m³)
Lower assessment threshold	40 % of 24-hour limit value (50 µg/m³, not to be exceeded more than three times in any calendar year)	40 % of winter critical level (8 µg/m³)

2. *Nitrogen dioxide and oxides of nitrogen*

	Hourly limit value for the protection of human health (NO_2)	Annual limit value for the protection of human health (NO_2)	Annual critical level for the protection of vegetation and natural ecosystems (NO_x)
Upper assessment threshold	70 % of limit value (140 µg/m³, not to be exceeded more than 18 times in any calendar year)	80 % of limit value (32 µg/m³)	80 % of critical level (24 µg/m³)
Lower assessment threshold	50 % of limit value (100 µg/m³, not to be exceeded more than 18 times in any calendar year)	65 % of limit value (26 µg/m³)	65 % of critical level (19,5 µg/m³)

3. *Particulate matter (PM_{10}/$PM_{2,5}$)*

	24-hour average PM_{10}	Annual average PM_{10}	Annual average $PM_{2,5}$ [1]
Upper assessment threshold	70 % of limit value (35 µg/m³, not to be exceeded more than 35 times in any calendar year)	70 % of limit value (28 µg/m³)	70 % of limit value (17 µg/m³)
Lower assessment threshold	50 % of limit value (25 µg/m³, not to be exceeded more than 35 times in any calendar year)	50 % of limit value (20 µg/m³)	50 % of limit value (12 µg/m³)

[1] The upper assessment threshold and the lower assessment threshold for $PM_{2,5}$ do not apply to the measurements to assess compliance with the $PM_{2,5}$ exposure reduction target for the protection of human health.

4. *Lead*

	Annual average
Upper assessment threshold	70 % of limit value (0,35 µg/m³)
Lower assessment threshold	50 % of limit value (0,25 µg/m³)

5. *Benzene*

	Annual average
Upper assessment threshold	70 % of limit value (3,5 μg/m^3)
Lower assessment threshold	40 % of limit value (2 μg/m^3)

6. *Carbon monoxide*

	Eight-hour average
Upper assessment threshold	70 % of limit value (7 mg/m^3)
Lower assessment threshold	50 % of limit value (5 mg/m^3)

B. **Determination of exceedances of upper and lower assessment thresholds**

Exceedances of upper and lower assessment thresholds shall be determined on the basis of concentrations during the previous five years where sufficient data are available. An assessment threshold shall be deemed to have been exceeded if it has been exceeded during at least three separate years out of those previous five years.

Where fewer than five years' data are available, Member States may combine measurement campaigns of short duration during the period of the year and at locations likely to be typical of the highest pollution levels with results obtained from information from emission inventories and modelling to determine exceedances of the upper and lower assessment thresholds.

ANNEX III

Assessment of ambient air quality and location of sampling points for the measurement of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10} and $PM_{2,5}$), lead, benzene and carbon monoxide in ambient air

A. **General**

Ambient air quality shall be assessed in all zones and agglomerations in accordance with the following criteria:

1. Ambient air quality shall be assessed at all locations except those listed in paragraph 2, in accordance with the criteria established by Sections B and C for the location of sampling points for fixed measurement. The principles established by Sections B and C shall also apply in so far as they are relevant in identifying the specific locations in which concentration of the relevant pollutants are established where ambient air quality is assessed by indicative measurement or modelling.

2. Compliance with the limit values directed at the protection of human health shall not be assessed at the following locations:

   (a) any locations situated within areas where members of the public do not have access and there is no fixed habitation;

   (b) in accordance with Article 2(1), on factory premises or at industrial installations to which all relevant provisions concerning health and safety at work apply;

   (c) on the carriageway of roads; and on the central reservations of roads except where there is normally pedestrian access to the central reservation.

B. **Macroscale siting of sampling points**

1. Protection of human health

   (a) Sampling points directed at the protection of human health shall be sited in such a way as to provide data on the following:

   — the areas within zones and agglomerations where the highest concentrations occur to which the population is likely to be directly or indirectly exposed for a period which is significant in relation to the averaging period of the limit value(s),

   — levels in other areas within the zones and agglomerations which are representative of the exposure of the general population,

   (b) Sampling points shall in general be sited in such a way as to avoid measuring very small micro-environments in their immediate vicinity, which means that a sampling point must be sited in such a way that the air sampled is representative of air quality for a street segment no less than 100 m length at traffic-orientated sites and at least 250 m × 250 m at industrial sites, where feasible;

   (c) Urban background locations shall be located so that their pollution level is influenced by the integrated contribution from all sources upwind of the station. The pollution level should not be dominated by a single source unless such a situation is typical for a larger urban area. Those sampling points shall, as a general rule, be representative for several square kilometres;

   (d) Where the objective is to assess rural background levels, the sampling point shall not be influenced by agglomerations or industrial sites in its vicinity, i.e. sites closer than five kilometres;

   (e) Where contributions from industrial sources are to be assessed, at least one sampling point shall be installed downwind of the source in the nearest residential area. Where the background concentration is not known, an additional sampling point shall be situated within the main wind direction;

   (f) Sampling points shall, where possible, also be representative of similar locations not in their immediate vicinity;

   (g) Account shall be taken of the need to locate sampling points on islands where that is necessary for the protection of human health.

2. Protection of vegetation and natural ecosystems

Sampling points targeted at the protection of vegetation and natural ecosystems shall be sited more than 20 km away from agglomerations or more than 5 km away from other built-up areas, industrial installations or motorways or major roads with traffic counts of more than 50 000 vehicles per day, which means that a sampling point must be sited in such a way that the air sampled is representative of air quality in a surrounding area of at least 1 000 km^2. A Member State may provide for a sampling point to be sited at a lesser distance or to be representative of air quality in a less extended area, taking account of geographical conditions or of the opportunities to protect particularly vulnerable areas.

Account shall be taken of the need to assess air quality on islands.

C. **Microscale siting of sampling points**

In so far as is practicable, the following shall apply:

— the flow around the inlet sampling probe shall be unrestricted (free in an arc of at least 270°) without any obstructions affecting the airflow in the vicinity of the sampler (normally some metres away from buildings, balconies, trees and other obstacles and at least 0,5 m from the nearest building in the case of sampling points representing air quality at the building line),

— in general, the inlet sampling point shall be between 1,5 m (the breathing zone) and 4 m above the ground. Higher positions (up to 8 m) may be necessary in some circumstances. Higher siting may also be appropriate if the station is representative of a large area,

— the inlet probe shall not be positioned in the immediate vicinity of sources in order to avoid the direct intake of emissions unmixed with ambient air,

— the sampler's exhaust outlet shall be positioned so that recirculation of exhaust air to the sampler inlet is avoided,

— for all pollutants, traffic-orientated sampling probes shall be at least 25 m from the edge of major junctions and no more than 10 m from the kerbside.,

The following factors may also be taken into account:

— interfering sources,

— security,

— access,

— availability of electrical power and telephone communications,

— visibility of the site in relation to its surroundings,

— safety of the public and operators,

— the desirability of co-locating sampling points for different pollutants,

— planning requirements.,

D. **Documentation and review of site selection**

The site-selection procedures shall be fully documented at the classification stage by such means as compass-point photographs of the surrounding area and a detailed map. Sites shall be reviewed at regular intervals with repeated documentation to ensure that selection criteria remain valid over time.

ANNEX IV

MEASUREMENTS AT RURAL BACKGROUND LOCATIONS IRRESPECTIVE OF CONCENTRATION

A. Objectives

The main objectives of such measurements are to ensure that adequate information is made available on levels in the background. This information is essential to judge the enhanced levels in more polluted areas (such as urban background, industry related locations, traffic related locations), assess the possible contribution from long-range transport of air pollutants, support source apportionment analysis and for the understanding of specific pollutants such as particulate matter. It is also essential for the increased use of modelling also in urban areas.

B. Substances

Measurement of $PM_{2,5}$ must include at least the total mass concentration and concentrations of appropriate compounds to characterise its chemical composition. At least the list of chemical species given below shall be included.

SO_4^{2-}	Na^+	NH_4^+	Ca^{2+}	elemental carbon (EC)
NO_3^-	K^+	Cl^-	Mg^{2+}	organic carbon (OC)

C. Siting

Measurements should be taken in particular in rural background areas in accordance with parts A, B and C of Annex III.

ANNEX V

Criteria for determining minimum numbers of sampling points for fixed measurement of concentrations of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10}, $PM_{2,5}$), lead, benzene and carbon monoxide in ambient air

A. Minimum number of sampling points for fixed measurement to assess compliance with limit values for the protection of human health and alert thresholds in zones and agglomerations where fixed measurement is the sole source of information

1. *Diffuse sources*

Population of agglomeration or zone (thousands)	If maximum concentrations exceed the upper assessment threshold (1)		If maximum concentrations are between the upper and lower assessment thresholds	
	Pollutants except PM	PM (2) (sum of PM_{10} and $PM_{2,5}$)	Pollutants except PM	PM (2) (sum of PM_{10} and $PM_{2,5}$)
0-249	1	2	1	1
250-499	2	3	1	2
500-749	2	3	1	2
750-999	3	4	1	2
1 000-1 499	4	6	2	3
1 500-1 999	5	7	2	3
2 000-2 749	6	8	3	4
2 750-3 749	7	10	3	4
3 750-4 749	8	11	3	6
4 750-5 999	9	13	4	6
≥ 6 000	10	15	4	7

(1) For nitrogen dioxide, particulate matter, benzene and carbon monoxide: to include at least one urban background monitoring station and one traffic-orientated station provided this does not increase the number of sampling points. For these pollutants, the total number of urban-background stations and the total number of traffic oriented stations in a Member State required under Section A(1) shall not differ by more than a factor of 2. Sampling points with exceedances of the limit value for PM_{10} within the last three years shall be maintained, unless a relocation is necessary owing to special circumstances, in particular spatial development.

(2) Where $PM_{2,5}$ and PM_{10} are measured in accordance with Article 8 at the same monitoring station, these shall count as two separate sampling points. The total number of $PM_{2,5}$ and PM_{10} sampling points in a Member State required under Section A(1) shall not differ by more than a factor of 2, and the number of $PM_{2,5}$ sampling points in the urban background of agglomerations and urban areas shall meet the requirements under Section B of Annex V.

2. *Point sources*

For the assessment of pollution in the vicinity of point sources, the number of sampling points for fixed measurement shall be calculated taking into account emission densities, the likely distribution patterns of ambient-air pollution and the potential exposure of the population.

B. Minimum number of sampling points for fixed measurement to assess compliance with the $PM_{2,5}$ exposure reduction target for the protection of human health

One sampling point per million inhabitants summed over agglomerations and additional urban areas in excess of 100 000 inhabitants shall be operated for this purpose. Those sampling points may coincide with sampling points under Section A.

C. Minimum number of sampling points for fixed measurements to assess compliance with critical levels for the protection of vegetation in zones other than agglomerations

If maximum concentrations exceed the upper assessment threshold	If maximum concentrations are between upper and lower assessment threshold
1 station every 20 000 km^2	1 station every 40 000 km^2

In island zones the number of sampling points for fixed measurement should be calculated taking into account the likely distribution patterns of ambient-air pollution and the potential exposure of vegetation.

ANNEX VI

Reference methods for assessment of concentrations of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10} and $PM_{2,5}$), lead, benzene, carbon monoxide, and ozone

A. **Reference measurement methods**

1. *Reference method for the measurement of sulphur dioxide*

The reference method for the measurement of sulphur dioxide is that described in EN 14212:2005 'Ambient air quality — Standard method for the measurement of the concentration of sulphur dioxide by ultraviolet fluorescence'.

2. *Reference method for the measurement of nitrogen dioxide and oxides of nitrogen*

The reference method for the measurement of nitrogen dioxide and oxides of nitrogen is that described in EN 14211:2005 'Ambient air quality — Standard method for the measurement of the concentration of nitrogen dioxide and nitrogen monoxide by chemiluminescence'.

3. *Reference method for the sampling and measurement of lead*

The reference method for the sampling of lead is that described in Section A(4) of this Annex. The reference method for the measurement of lead is that described in EN 14902:2005 'Standard method for measurement of Pb/Cd/As/Ni in the PM_{10} fraction of suspended particulate matter'.

4. *Reference method for the sampling and measurement of PM_{10}*

The reference method for the sampling and measurement of PM_{10} is that described in EN 12341:1999 'Air Quality — Determination of the PM_{10} fraction of suspended particulate matter — Reference method and field test procedure to demonstrate reference equivalence of measurement methods'.

5. *Reference method for the sampling and measurement of $PM_{2,5}$*

The reference method for the sampling and measurement of $PM_{2,5}$ is that described in EN 14907:2005 'Standard gravimetric measurement method for the determination of the $PM_{2,5}$ mass fraction of suspended particulate matter'.

6. *Reference method for the sampling and measurement of benzene*

The reference method for the measurement of benzene is that described in EN 14662:2005, parts 1, 2 and 3 'Ambient air quality — Standard method for measurement of benzene concentrations'.

7. *Reference method for the measurement of carbon monoxide*

The reference method for the measurement of carbon monoxide is that described in EN 14626:2005 'Ambient air quality — Standard method for the measurement of the concentration of carbon monoxide by non-dispersive infrared spectroscopy'.

8. *Reference method for measurement of ozone*

The reference method for the measurement of ozone is that described in EN 14625:2005 'Ambient air quality — Standard method for the measurement of the concentration of ozone by ultraviolet photometry'.

B. **Demonstration of equivalence**

1. A Member State may use any other method which it can demonstrate gives results equivalent to any of the methods referred to in Section A or, in the case of particulate matter, any other method which the Member State concerned can demonstrate displays a consistent relationship to the reference method. In that event the results achieved by that method must be corrected to produce results equivalent to those that would have been achieved by using the reference method.

2. The Commission may require the Member States to prepare and submit a report on the demonstration of equivalence in accordance with paragraph 1.

3. When assessing the acceptability of the report mentioned in paragraph 2, the Commission will make reference to its guidance on the demonstration of equivalence (to be published). Where Member States have been using interim factors to approximate equivalence, the latter shall be confirmed and/or amended with reference to the Commission's guidance.

4. Member States should ensure that whenever appropriate, the correction is also applied retroactively to past measurement data in order to achieve better data comparability.

C. **Standardisation**

For gaseous pollutants the volume must be standardised at a temperature of 293 K and an atmospheric pressure of 101,3 kPa. For particulate matter and substances to be analysed in particulate matter (e.g. lead) the sampling volume refers to ambient conditions in terms of temperature and atmospheric pressure at the date of measurements.

D. **Introduction of new equipment**

All new equipment purchased for implementation of this Directive must comply with the reference method or equivalent by 11 June 2010.

All equipment used in fixed measurements must comply with the reference method or equivalent by 11 June 2013.

E. **Mutual recognition of data**

In carrying out the type approval to demonstrate that equipment meets the performance requirements of the reference methods listed in Section A, competent authorities and bodies designated pursuant to Article 3 shall accept test reports issued in other Member States by laboratories accredited to EN ISO 17025 for carrying out such testing.

ANNEX VII

OZONE TARGET VALUES AND LONG-TERM OBJECTIVES

A. Definitions and criteria

1. *Definitions*

AOT40 (expressed in (µg/m³) · hours) means the sum of the difference between hourly concentrations greater than 80 µg/m³ (= 40 parts per billion) and 80 µg/m³ over a given period using only the one-hour values measured between 8.00 and 20.00 Central European Time (CET) each day.

2. *Criteria*

The following criteria shall be used for checking validity when aggregating data and calculating statistical parameters:

Parameter	Required proportion of valid data
One hour values	75 % (i.e. 45 minutes)
Eight hours values	75 % of values (i.e. six hours)
Maximum daily 8 hours mean from hourly running 8 hours	75 % of the hourly running eight hours averages (i.e. 18 eight-hourly averages per day)
AOT40	90 % of the one hour values over the time period defined for calculating the AOT40 value (1)
Annual mean	75 % of the one hour values over summer (April to September) and 75 % over winter (January to March, October to December) seasons separately
Number of exceedances and maximum values per month	90 % of the daily maximum eight hours mean values (27 available daily values per month) 90 % of the one hour values between 8.00 and 20.00 CET
Number of exceedances and maximum values per year	five out of six months over the summer season (April to September)

(1) In cases where all possible measured data are not available, the following factor shall be used to calculate AOT40 values:

$$AOT40_{estimate} = AOT40_{measured} \times \frac{\text{total possible number of hours (*)}}{\text{number of measured hourly values}}$$

(*) being the number of hours within the time period of AOT40 definition, (i.e. 08:00 to 20:00 CET from 1 May to 31 July each year, for vegetation protection and from 1 April to 30 September each year for forest protection).

B. Target values

Objective	Averaging period	Target value	Date by which target value should be met (1)
Protection of human health	Maximum daily eight-hour mean (2)	120 µg/m³ not to be exceeded on more than 25 days per calendar year averaged over three years (3)	1.1.2010
Protection of vegetation	May to July	AOT40 (calculated from 1 h values) 18 000 µg/m³ · h averaged over five years (3)	1.1.2010

(1) Compliance with target values will be assessed as of this date. That is, 2010 will be the first year the data for which is used in calculating compliance over the following three or five years, as appropriate.

(2) The maximum daily eight-hour mean concentration shall be selected by examining eight-hour running averages, calculated from hourly data and updated each hour. Each eight -hour average so calculated shall be assigned to the day on which it ends. i.e. the first calculation period for any one day will be the period from 17:00 on the previous day to 01:00 on that day; the last calculation period for any one day will be the period from 16:00 to 24:00 on the day.

(3) If the three or five year averages cannot be determined on the basis of a full and consecutive set of annual data, the minimum annual data required for checking compliance with the target values will be as follows:

— for the target value for the protection of human health: valid data for one year,

— for the target value for the protection of vegetation: valid data for three years.

C. **Long-term objectives**

Objective	Averaging period	Longterm objective	Date by which the longterm objective should be met
Protection of human health	Maximum daily eight-hour mean within a calendar year	120 μg/m^3	not defined
Protection of vegetation	May to July	AOT40 (calculated from 1 h values) 6 000 μg/m^3 · h	not defined

ANNEX VIII

Criteria for classifying and locating sampling points for assessments of ozone concentrations

The following apply to fixed measurements:

A. **Macroscale siting**

Type of station	Objectives of measurement	Representativeness [1]	Macroscale siting criteria
Urban	Protection of human health: to assess the exposure of the urban population to ozone, i.e. where population density and ozone concentration are relatively high and representative of the exposure of the general population	A few km^2	Away from the influence of local emissions such as traffic, petrol stations, etc.; vented locations where well mixed levels can be measured; locations such as residential and commercial areas of cities, parks (away from the trees), big streets or squares with very little or no traffic, open areas characteristic of educational, sports or recreation facilities
Suburban	Protection of human health and vegetation: to assess the exposure of the population and vegetation located in the outskirts of the agglomeration, where the highest ozone levels, to which the population and vegetation are likely to be directly or indirectly exposed occur	Some tens of km^2	At a certain distance from the area of maximum emissions, downwind following the main wind direction/directions during conditions favourable to ozone formation; where population, sensitive crops or natural ecosystems located in the outer fringe of an agglomeration are exposed to high ozone levels; where appropriate, some suburban stations also upwind of the area of maximum emissions, in order to determine the regional background levels of ozone
Rural	Protection of human health and vegetation: to assess the exposure of population, crops and natural ecosystems to sub-regional scale ozone concentrations	Sub-regional levels (some hundreds of km^2)	Stations can be located in small settlements and/or areas with natural ecosystems, forests or crops; representative for ozone away from the influence of immediate local emissions such as industrial installations and roads; at open area sites, but not on summits of higher mountains
Rural background	Protection of vegetation and human health: to assess the exposure of crops and natural ecosystems to regional-scale ozone concentrations as well as exposure of the population	Regional/ national/ continental levels (1 000 to 10 000 km^2)	Station located in areas with lower population density, e.g. with natural ecosystems, forests, at a distance of at least 20 km from urban and industrial areas and away from local emissions; avoid locations which are subject to locally enhanced formation of ground-near inversion conditions, also summits of higher mountains; coastal sites with pronounced diurnal wind cycles of local character are not recommended.

[1] Sampling points should, where possible, be representative of similar locations not in their immediate vicinity.

For rural and rural background stations the location shall, where appropriate, be coordinated with the monitoring requirements of Commission Regulation (EC) No 1737/2006 of 7 November 2006 laying down detailed rules for the implementation of Regulation (EC) No 2152/2003 of the European Parliament and of the Council concerning monitoring of forests and environmental interactions in the Community [1].

[1] OJ L 334, 30.11.2006, p. 1.

B. **Microscale siting**

In so far as is practicable the procedure on microscale siting in Section C of Annex III shall be followed, ensuring also that the inlet probe is positioned well away from such sources as furnaces and incineration flues and more than 10 m from the nearest road, with distance increasing as a function of traffic intensity.

C. **Documentation and review of site selection**

The procedures in Section D of Annex III shall be followed, applying proper screening and interpretation of the monitoring data in the context of the meteorological and photochemical processes affecting the ozone concentrations measured at the respective sites.

ANNEX IX

Criteria for determining the minimum number of sampling points for fixed measurement of concentrations of ozone

A. **Minimum number of sampling points for fixed continuous measurements to assess compliance with target values, long-term objectives and information and alert thresholds where such measurements are the sole source of information**

Population (× 1 000)	Agglomerations (urban and suburban) (1)	Other zones (suburban and rural) (1)	Rural background
< 250		1	1 station/50 000 km² as an average density over all zones per country (2)
< 500	1	2	
< 1 000	2	2	
< 1 500	3	3	
< 2 000	3	4	
< 2 750	4	5	
< 3 750	5	6	
> 3 750	One additional station per 2 million inhabitants	One additional station per 2 million inhabitants	

(1) At least 1 station in suburban areas, where the highest exposure of the population is likely to occur. In agglomerations at least 50 % of the stations shall be located in suburban areas.

(2) 1 station per 25 000 km² for complex terrain is recommended.

B. **Minimum number of sampling points for fixed measurements for zones and agglomerations attaining the long-term objectives**

The number of sampling points for ozone shall, in combination with other means of supplementary assessment such as air quality modelling and collocated nitrogen dioxide measurements, be sufficient to examine the trend of ozone pollution and check compliance with the long-term objectives. The number of stations located in agglomerations and other zones may be reduced to one-third of the number specified in Section A. Where information from fixed measurement stations is the sole source of information, at least one monitoring station shall be kept. If, in zones where there is supplementary assessment, the result of this is that a zone has no remaining station, coordination with the number of stations in neighbouring zones shall ensure adequate assessment of ozone concentrations against long-term objectives. The number of rural background stations shall be one per 100 000 km².

ANNEX X

MEASUREMENTS OF OZONE PRECURSOR SUBSTANCES

A. Objectives

The main objectives of such measurements are to analyse any trend in ozone precursors, to check the efficiency of emission reduction strategies, to check the consistency of emission inventories and to help attribute emission sources to observed pollution concentrations.

An additional aim is to support the understanding of ozone formation and precursor dispersion processes, as well as the application of photochemical models.

B. Substances

Measurement of ozone precursor substances shall include at least nitrogen oxides (NO and NO_2), and appropriate volatile organic compounds (VOC). A list of volatile organic compounds recommended for measurement is given below:

	1-Butene	Isoprene	Ethyl benzene
Ethane	Trans-2-Butene	n-Hexane	m + p-Xylene
Ethylene	cis-2-Butene	i-Hexane	o-Xylene
Acetylene	1,3-Butadiene	n-Heptane	1,2,4-Trimethylebenzene
Propane	n-Pentane	n-Octane	1,2,3-Trimethylebenzene
Propene	i-Pentane	i-Octane	1,3,5-Trimethylebenzene
n-Butane	1-Pentene	Benzene	Formaldehyde
i-Butane	2-Pentene	Toluene	Total non-methane hydrocarbons

C. Siting

Measurements shall be taken in particular in urban or suburban areas at any monitoring site set up in accordance with the requirements of this Directive and considered appropriate with regard to the monitoring objectives referred to in Section A.

ANNEX XI

LIMIT VALUES FOR THE PROTECTION OF HUMAN HEALTH

A. **Criteria**

Without prejudice to Annex I, the following criteria shall be used for checking validity when aggregating data and calculating statistical parameters:

Parameter	Required proportion of valid data
One hour values	75 % (i.e. 45 minutes)
Eight hours values	75 % of values (i.e. 6 hours)
Maximum daily 8-hour mean	75 % of the hourly running eight hour averages (i.e. 18 eight hour averages per day)
24-hour values	75 % of the hourly averages (i.e. at least 18 hour values)
Annual mean	90 % (1) of the one hour values or (if not available) 24-hour values over the year

(1) The requirements for the calculation of annual mean do not include losses of data due to the regular calibration or the normal maintenance of the instrumentation.

B. **Limit values**

Averaging Period	Limit value	Margin of tolerance	Date by which limit value is to be met
Sulphur dioxide			
One hour	350 µg/m^3, not to be exceeded more than 24 times a calendar year	150 µg/m^3 (43 %)	— (1)
One day	125 µg/m^3, not to be exceeded more than 3 times a calendar year	None	— (1)
Nitrogen dioxide			
One hour	200 µg/m^3, not to be exceeded more than 18 times a calendar year	50 % on 19 July 1999, decreasing on 1 January 2001 and every 12 months thereafter by equal annual percentages to reach 0 % by 1 January 2010	1 January 2010
Calendar year	40 µg/m^3	50 % on 19 July 1999, decreasing on 1 January 2001 and every 12 months thereafter by equal annual percentages to reach 0 % by 1 January 2010	1 January 2010
Benzene			
Calendar year	5 µg/m^3	5 µg/m^3 (100 %) on 13 December 2000, decreasing on 1 January 2006 and every 12 months thereafter by 1 µg/m^3 to reach 0 % by 1 January 2010	1 January 2010
Carbon monoxide			
maximum daily eight hour mean (2)	10 mg/m^3	60 %	— (1)

Averaging Period	Limit value	Margin of tolerance	Date by which limit value is to be met
Lead			
Calendar year	0,5 µg/m³ (3)	100 %	— (3)
PM_{10}			
One day	50 µg/m³, not to be exceeded more than 35 times a calendar year	50 %	— (1)
Calendar year	40 µg/m³	20 %	— (1)

(1) Already in force since 1 January 2005

(2) The maximum daily eight hour mean concentration will be selected by examining eight hour running averages, calculated from hourly data and updated each hour. Each eight hour average so calculated will be assigned to the day on which it ends i.e. the first calculation period for any one day will be the period from 17:00 on the previous day to 01:00 on that day; the last calculation period for any one day will be the period from 16:00 to 24:00 on that day.

(3) Already in force since 1 January 2005. Limit value to be met only by 1 January 2010 in the immediate vicinity of the specific industrial sources situated on sites contaminated by decades of industrial activities. In such cases, the limit value until 1 January 2010 will be 1,0 µg/m³. The area in which higher limit values apply must not extend further than 1 000 m from such specific sources.

ANNEX XII

INFORMATION AND ALERT THRESHOLDS

A. Alert thresholds for pollutants other than ozone

To be measured over three consecutive hours at locations representative of air quality over at least 100 km^2 or an entire zone or agglomeration, whichever is the smaller.

Pollutant	Alert threshold
Sulphur dioxide	500 $\mu g/m^3$
Nitrogen dioxide	400 $\mu g/m^3$

B. Information and alert thresholds for ozone

Purpose	Averaging period	Threshold
Information	1 hour	180 $\mu g/m^3$
Alert	1 hour (1)	240 $\mu g/m^3$

(1) For the implementation of Article 24, the exceedance of the threshold is to be measured or predicted for three consecutive hours.

ANNEX XIII

CRITICAL LEVELS FOR THE PROTECTION OF VEGETATION

Averaging period	Critical level	Margin of tolerance
Sulphur dioxide		
Calendar year and winter (1 October to 31 March)	20 μg/m^3	None
Oxides of nitrogen		
Calendar year	30 μg/m^3 NO_x	None

ANNEX XIV

NATIONAL EXPOSURE REDUCTION TARGET, TARGET VALUE AND LIMIT VALUE FOR $PM_{2,5}$

A. Average exposure indicator

The Average Exposure Indicator expressed in μg/m³ (AEI) shall be based upon measurements in urban background locations in zones and agglomerations throughout the territory of a Member State. It should be assessed as a three-calendar year running annual mean concentration averaged over all sampling points established pursuant to Section B of Annex V. The AEI for the reference year 2010 shall be the mean concentration of the years 2008, 2009 and 2010.

However, where data are not available for 2008, Member States may use the mean concentration of the years 2009 and 2010 or the mean concentration of the years 2009, 2010 and 2011. Member States making use of these possibilities shall communicate their decisions to the Commission by 11 September 2008.

The AEI for the year 2020 shall be the three-year running mean concentration averaged over all those sampling points for the years 2018, 2019 and 2020. The AEI is used for the examination whether the national exposure reduction target is met.

The AEI for the year 2015 shall be the three-year running mean concentration averaged over all those sampling points for the years 2013, 2014 and 2015. The AEI is used for the examination whether the exposure concentration obligation is met.

B. National exposure reduction target

Exposure reduction target relative to the AEI in 2010		Year by which the exposure reduction target should be met
Initial concentration in μg/m³	Reduction target in percent	2020
< 8,5 = 8,5	0 %	
> 8,5 — < 13	10 %	
= 13 — < 18	15 %	
= 18 — < 22	20 %	
≥ 22	All appropriate measures to achieve 18 μg/m³	

Where the AEI in the reference year is 8,5 μg/m³ or less the exposure reduction target shall be zero. The reduction target shall be zero also in cases where the AEI reaches the level of 8,5 μg/m³ at any point of time during the period from 2010 to 2020 and is maintained at or below that level.

C. Exposure concentration obligation

Exposure concentration obligation	Year by which the obligation value is to be met
20 μg/m³	2015

D. Target value

Averaging period	Target value	Date by which target value should be met
Calendar year	25 μg/m³	1 January 2010

E. **Limit value**

Averaging period	Limit value	Margin of tolerance	Date by which limit value is to be met
STAGE 1			
Calendar year	25 μg/m^3	20 % on 11 June 2008, decreasing on the next 1 January and every 12 months thereafter by equal annual percentages to reach 0 % by 1 January 2015	1 January 2015
STAGE 2 (1)			
Calendar year	20 μg/m^3		1 January 2020

(1) Stage 2 — indicative limit value to be reviewed by the Commission in 2013 in the light of further information on health and environmental effects, technical feasibility and experience of the target value in Member States.

ANNEX XV

Information to be included in the local, regional or national air quality plans for improvement in ambient air quality

A. **Information to be provided under article 23 (air quality plans)**

1. *Localisation of excess pollution*

   (a) region;

   (b) city (map);

   (c) measuring station (map, geographical coordinates).

2. *General information*

   (a) type of zone (city, industrial or rural area);

   (b) estimate of the polluted area (km^2) and of the population exposed to the pollution;

   (c) useful climatic data;

   (d) relevant data on topography;

   (e) sufficient information on the type of targets requiring protection in the zone.

3. *Responsible authorities*

   Names and addresses of persons responsible for the development and implementation of improvement plans.

4. *Nature and assessment of pollution*

   (a) concentrations observed over previous years (before the implementation of the improvement measures);

   (b) concentrations measured since the beginning of the project;

   (c) techniques used for the assessment.

5. *Origin of pollution*

   (a) list of the main emission sources responsible for pollution (map);

   (b) total quantity of emissions from these sources (tonnes/year);

   (c) information on pollution imported from other regions.

6. *Analysis of the situation*

   (a) details of those factors responsible for the exceedance (e.g. transport, including cross-border transport, formation of secondary pollutants in the atmosphere);

   (b) details of possible measures for the improvement of air quality.

7. *Details of those measures or projects for improvement which existed prior to 11 June 2008, i.e:*

   (a) local, regional, national, international measures;

   (b) observed effects of these measures.

8. *Details of those measures or projects adopted with a view to reducing pollution following the entry into force of this Directive:*

   (a) listing and description of all the measures set out in the project;

   (b) timetable for implementation;

   (c) estimate of the improvement of air quality planned and of the expected time required to attain these objectives.

9. *Details of the measures or projects planned or being researched for the long term.*

10. *List of the publications, documents, work, etc., used to supplement information required under this Annex.*

B. **Information to be provided under article 22(1)**

1. All information as laid down in Section A.

2. Information concerning the status of implementation of the following Directives:

   1. Council Directive 70/220/EEC of 20 March 1970 on the approximation of the laws of the Member States on measures to be taken against air pollution by emissions from motor vehicles ([1]);

   2. Directive 94/63/EC of the European Parliament and of the Council of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations ([2]);

   3. Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control ([3]);

   4. Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery ([4]);

   5. Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels ([5]);

   6. Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations ([6]);

   7. Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels ([7]);

   8. Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste ([8]);

   9. Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants;

   10. Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants;

([1]) OJ L 76, 6.4.1970, p. 1. Directive as last amended by Directive 2006/96/EC (OJ L 363, 20.12.2006, p. 81).
([2]) OJ L 365, 31.12.1994, p. 24. Directive as amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).
([3]) OJ L 24, 29.1.2008, p. 8.
([4]) OJ L 59, 27.2.1998, p. 1. Directive as last amended by Directive 2006/105/EC.
([5]) OJ L 350, 28.12.1998, p. 58. Directive as amended by Regulation (EC) No 1882/2003.
([6]) OJ L 85, 29.3.1999, p. 1. Directive as last amended by Directive 2004/42/EC of the European Parliament and of the Council (OJ L 143, 30.4.2004, p. 87).
([7]) OJ L 121, 11.5.1999, p. 13. Directive as last amended by Directive 2005/33/EC of the European Parliament and of the Council (OJ L 191, 22.7.2005, p. 59).
([8]) OJ L 332, 28.12.2000, p. 91.

11. Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products [1];

12. Directive 2005/33/EC of the European Parliament and of the Council of 6 July 2005 amending Directive 1999/32/EC as regards the sulphur content of marine fuels [2];

13. Directive 2005/55/EC of the European Parliament and of the Council of 28 September 2005 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles [3];

14. Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services [4].

3. Information on all air pollution abatement measures that have been considered at appropriate local, regional or national level for implementation in connection with the attainment of air quality objectives, including:

(a) reduction of emissions from stationary sources by ensuring that polluting small and medium sized stationary combustion sources (including for biomass) are fitted with emission control equipment or replaced;

(b) reduction of emissions from vehicles through retrofitting with emission control equipment. The use of economic incentives to accelerate take-up should be considered;

(c) procurement by public authorities, in line with the handbook on environmental public procurement, of road vehicles, fuels and combustion equipment to reduce emissions, including the purchase of:

— new vehicles, including low emission vehicles,

— cleaner vehicle transport services,

— low emission stationary combustion sources,

— low emission fuels for stationary and mobile sources,

(d) measures to limit transport emissions through traffic planning and management (including congestion pricing, differentiated parking fees or other economic incentives; establishing low emission zones);

(e) measures to encourage a shift of transport towards less polluting modes;

(f) ensuring that low emission fuels are used in small, medium and large scale stationary sources and in mobile sources;

(g) measures to reduce air pollution through the permit system under Directive 2008/1/EC, the national plans under Directive 2001/80/EC, and through the use of economic instruments such as taxes, charges or emission trading.

(h) where appropriate, measures to protect the health of children or other sensitive groups.

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[1] OJ L 143, 30.4.2004, p. 87.
[2] OJ L 191, 22.7.2005, p. 59.
[3] OJ L 275, 20.10.2005, p. 1. Directive as last amended by Regulation (EC) No 715/2007 (OJ L 171, 29.6.2007, p. 1).
[4] OJ L 114, 27.4.2006, p. 64.

ANNEX XVI

PUBLIC INFORMATION

1. Member States shall ensure that up-to-date information on ambient concentrations of the pollutants covered by this Directive is routinely made available to the public.

2. Ambient concentrations provided shall be presented as average values according to the appropriate averaging period as laid down in Annex VII and Annexes XI to XIV. The information shall at least indicate any levels exceeding air quality objectives including limit values, target values, alert thresholds, information thresholds or long term objectives of the regulated pollutant. It shall also provide a short assessment in relation to the air quality objectives and appropriate information regarding effects on health, or, where appropriate, vegetation.

3. Information on ambient concentrations of sulphur dioxide, nitrogen dioxide, particulate matter (at least PM_{10}), ozone and carbon monoxide shall be updated on at least a daily basis, and, wherever practicable, information shall be updated on an hourly basis. Information on ambient concentrations of lead and benzene, presented as an average value for the last 12 months, shall be updated on a three-monthly basis, and on a monthly basis, wherever practicable.

4. Member States shall ensure that timely information about actual or predicted exceedances of alert thresholds, and any information threshold is provided to the public. Details supplied shall include at least the following information:

   (a) information on observed exceedance(s):

      — location or area of the exceedance,

      — type of threshold exceeded (information or alert),

      — start time and duration of the exceedance,

      — highest one hour concentration and in addition highest eight hour mean concentration in the case of ozone;

   (b) forecast for the following afternoon/day(s):

      — geographical area of expected exceedances of information and/or alert threshold,

      — expected changes in pollution (improvement, stabilisation or deterioration), together with the reasons for those changes;

   (c) information on the type of population concerned, possible health effects and recommended behaviour:

      — information on population groups at risk,

      — description of likely symptoms,

      — recommended precautions to be taken by the population concerned,

      — where to find further information;

   (d) information on preventive action to reduce pollution and/or exposure to it: indication of main source sectors; recommendations for action to reduce emissions;

   (e) in the case of predicted exceedances, Member State shall take steps to ensure that such details are supplied to the extent practicable.

ANNEX XVII

CORRELATION TABLE

This Directive	Directive 96/62/EC	Directive 1999/30/EC	Directive 2000/69/EC	Directive 2002/3/EC
Article 1	Article 1	Article 1	Article 1	Article 1
Article 2(1) to (5)	Article 2(1) to (5)	—	—	—
Article 2(6) and (7)	—	—	—	—
Article 2(8)	Article 2(8)	Article 2(7)	—	—
Article 2(9)	Article 2(6)	—	—	Article 2(9)
Article 2(10)	Article 2(7)	Article 2(6)	—	Article 2(11)
Article 2(11)	—	—	—	Article 2(12)
Article 2(12) and (13)	—	Article 2(13) and (14)	Article 2(a) and (b)	—
Article 2(14)	—	—	—	Article 2(10)
Article 2(15) and (16)	Article 2(9) and (10)	Article 2(8) and (9)	—	Article 2(7) and (8)
Article 2(17) and (18)	—	Article 2(11) and (12)	—	—
Article 2(19), (20), (21), (22) and (23)	—	—	—	—
Article 2(24)	—	Article 2(10)	—	—
Article 2(25) and (26)	Article 6(5)	—	—	—
Article 2(27)	—	—	—	Article 2(13)
Article 2(28)	—	—	—	Article 2(3)
Article 3, with the exception of paragraph (1)(f)	Article 3	—	—	—
Article 3(1)(f)	—	—	—	—
Article 4	Article 2(9) and (10), Article 6(1)	—	—	—
Article 5	—	Article 7(1)	Article 5(1)	—
Article 6(1) to (4)	Article 6(1) to (4)	—	—	—
Article 6(5)	—	—	—	—
Article 7	—	Article 7(2) and (3) with amendments	Article 5(2) and (3) with amendments	—
Article 8	—	Article 7(5)	Article 5(5)	—
Article 9	—	—	—	Article 9(1) first and second subparagraphs
Article 10	—	—	—	Article 9(1) to (3) with amendments
Article 11(1)	—	—	—	Article 9(4)
Article 11(2)	—	—	—	—
Article 12	Article 9	—	—	—
Article 13(1)	—	Articles 3(1), 4(1), 5(1) and 6	Articles 3(1) and 4	—

This Directive	Directive 96/62/EC	Directive 1999/30/EC	Directive 2000/69/EC	Directive 2002/3/EC
Article 13(2)	—	Articles 3(2) and 4(2)	—	—
Article 13(3)	—	Article 5(5)	—	—
Article 14	—	Articles 3(1) and 4(1) with amendments	—	—
Article 15	—	—	—	—
Article 16	—	—	—	—
Article 17(1)	—	—	—	Articles 3(1) and 4(1)
Article 17(2)	—	—	—	Article 3(2) and (3)
Article 17(3)	—	—	—	Article 4(2)
Article 18	—	—	—	Article 5
Article 19	Article 10 with amendments	Article 8(3)	—	Article 6 with amendments
Article 20	—	Articles 3(4) and 5(4) with amendments	—	—
Article 21	—	—	—	—
Article 22	—	—	—	—
Article 23	Article 8(1) to (4) with amendments	—	—	—
Article 24	Article 7(3) with amendments	—	—	Article 7 with amendments
Article 25	Article 8(5) with amendments	—	—	Article 8 with amendments
Article 26	—	Article 8 with amendments	Article 7 with amendments	Article 6 with amendments
Article 27	Article 11 with amendments	Article 5(2) second subparagraph	—	Article 10 with amendments
Article 28(1)	Article 12(1) with amendments	—	—	—
Article 28(2)	Article 11 with amendments	—	—	—
Article 28(3)	—	—	—	—
Article 28(4)	—	Annex IX with amendments	—	—
Article 29	Article 12(2)	—	—	—
Article 30	—	Article 11	Article 9	Article 14
Article 31	—	—	—	—
Article 32	—	—	—	—
Article 33	Article 13	Article 12	Article 10	Article 15
Article 34	Article 14	Article 13	Article 11	Article 17
Article 35	Article 15	Article 14	Article 12	Article 18
Annex I	—	Annex VIII with amendments	Annex VI	Annex VII
Annex II	—	Annex V with amendments	Annex III	—
Annex III	—	Annex VI	Annex IV	—

This Directive	Directive 96/62/EC	Directive 1999/30/EC	Directive 2000/69/EC	Directive 2002/3/EC
Annex IV	—	—	—	—
Annex V	—	Annex VII with amendments	Annex V	—
Annex VI	—	Annex IX with amendments	Annex VII	Annex VIII
Annex VII	—	—	—	Annex I, Annex III section II
Annex VIII	—	—	—	Annex IV
Annex IX	—	—	—	Annex V
Annex X	—	—	—	Annex VI
Annex XI	—	Annex I, section I, Annex II, section I and Annex III (with amendments); Annex IV (unchanged)	Annex I, Annex II	—
Annex XII	—	Annex I, section II, Annex II, section II,	—	Annex II, section I
Annex XIII	—	Annex I, section I, Annex II, section I	—	—
Annex XIV	—	—	—	—
Annex XV Section A	Annex IV	—	—	—
Annex XV Section B	—	—	—	—
Annex XVI	—	Article 8	Article 7	Article 6 with amendments

STATEMENT BY THE COMMISSION

The Commission takes note of the text adopted by the Council and the European Parliament for the Directive on ambient air quality and cleaner air for Europe. In particular, the Commission notes the importance attributed by the European Parliament and the Member States in Article 22(4) and recital 16 to Community measures for the abatement of air pollutant emissions at source.

The Commission recognises the need to reduce the emissions of harmful air pollutants if significant progress is to be delivered towards the objectives established in the Sixth Environmental Action Programme. The Commission's communication on a thematic strategy on air pollution sets out a significant number of possible Community measures. Significant progress on these and other measures has been made since the adoption of the strategy:

— the Council and Parliament have already adopted new legislation limiting the exhaust emissions of light duty vehicles,

— the Commission has adopted a proposal for new legislation to improve the effectiveness of Community industrial emissions legislation including intensive agricultural installations and measures to tackle smaller scale industrial combustion sources,

— the Commission has adopted a proposal for new legislation limiting the exhaust emissions of engines installed in heavy duty vehicles,

— in 2008 the Commission foresees new legislative proposals that would:

  — further reduce the Member States' permitted national emissions of key pollutants,

  — reduce emissions associated with refuelling of petrol cars at service stations,

  — address the sulphur content of fuels including marine fuels,

— preparatory work is also underway to investigate the feasibility of:

  — improving the eco-design and reducing the emissions of domestic boilers and water heaters,

  — reducing the solvent content of paints, varnishes and vehicle refinishing products,

  — reducing the exhaust emissions of non-road mobile machinery and thereby maximise the benefit of lower sulphur non-road fuels already proposed by the Commission,

— The Commission also continues to push for substantial emissions reductions from ships at the International Maritime Organisation and it is committed to bringing forward proposals for Community measures should the IMO fail to deliver sufficiently ambitious proposals as foreseen in 2008.

The Commission is, however, committed to the aims of its Better Regulation initiative and the need for proposals to be underpinned by a comprehensive assessment of the impacts and benefits. In this regard and in accordance with the Treaty establishing the European Community, the Commission will continue to evaluate the need to bring forward new legislative proposals but reserves its right to decide if and when it would be appropriate to present any such proposal.

STATEMENT BY THE NETHERLANDS

The Netherlands has always supported the development of ambitious and effective European policy on air quality and will continue to do so in the future. It is, therefore, happy with the compromise agreed by the Council and the European Parliament and compliments the Parliament, the Commission and the Presidency on the results achieved. The new Directive on ambient air quality marks significant progress for both the environment and public health.

As the Netherlands pointed out when the Common Position was drawn up, the air quality in our country is strongly influenced by transboundary developments and will therefore benefit enormously from an effective European approach. The Netherlands' main concern has been that the Directive should contain a balanced package of European and national measures, as well as realistic time limits to achieve the air quality targets. Only then will Member States be able to achieve the ambitious targets that have been set.

The Netherlands is pleased with the Commission's statement that it will present Community measures in good time. Timely, EU-wide compliance with the air quality standards will depend on sound European policy tackling pollution at the source. The Netherlands would especially point to the lack of data and prevailing uncertainties about emissions and concentrations of fine particulates ($PM_{2,5}$). It will of course make every effort to meet the objectives of the Directive by the target date. On the basis of the knowledge currently at our command, this will largely be feasible. The Dutch government is developing a National Air Quality Cooperation Programme to tackle locations where emission ceilings are persistently exceeded, so that, there too, air quality standards may be met by the target date.

The Netherlands is pleased that the Council and the European Parliament concluded their second reading in time for the Directive to take effect as of early 2008. This is essential for our own national programme, as well as actions in the countries around us. The Netherlands will work hard to ensure that the national cooperation programme and all local and regional measures are sufficient.

►B DIRECTIVE 2004/107/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air

(OJ L 23, 26.1.2005, p. 3)

Amended by:

		Official Journal		
		No	page	date
►M1	Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009	L 87	109	31.3.2009

▼B

DIRECTIVE 2004/107/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 15 December 2004

relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee ([1]),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([2]),

Whereas:

(1) On the basis of principles enshrined in Article 175(3) of the Treaty, the Sixth Community Environment Action Programme, adopted by Decision No 1600/2002/EC of the European Parliament and of the Council ([3]), establishes the need to reduce pollution to levels which minimise harmful effects on human health, paying particular attention to sensitive populations, and the environment as a whole, to improve the monitoring and assessment of air quality including the deposition of pollutants and to provide information to the public.

(2) Article 4(1) of Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management ([4]) requires the Commission to submit proposals for regulating the pollutants listed in Annex I to that Directive taking into account the provisions laid down in paragraphs 3 and 4 of that Article.

(3) Scientific evidence shows that arsenic, cadmium, nickel and some polycyclic aromatic hydrocarbons are human genotoxic carcinogens and that there is no identifiable threshold below which these substances do not pose a risk to human health. Impact on human health and the environment occurs via concentrations in ambient air and via deposition. With a view to cost-effectiveness, ambient air concentrations of arsenic, cadmium, nickel and polycyclic aromatic hydrocarbons, which would not pose a significant risk to human health, cannot be achieved in specific areas.

(4) With the aim of minimising harmful effects on human health, paying particular attention to sensitive populations, and the environment as a whole, of airborne arsenic, cadmium and nickel and polycyclic aromatic hydrocarbons, target values should be set, to be attained as far as possible. Benzo(a)pyrene should be used as a marker for the carcinogenic risk of polycyclic aromatic hydrocarbons in ambient air.

(5) The target values would not require any measures entailing disproportionate costs. Regarding industrial installations, they would not involve measures beyond the application of best available techniques (BAT) as required by Council Directive

([1]) OJ C 110, 30.4.2004, p. 16.
([2]) Opinion of the European Parliament of 20 April 2004 (not yet published in the Official Journal), Council Decision of 15 November 2004.
([3]) OJ L 242, 10.9.2002, p. 1.
([4]) OJ L 296, 21.11.1996, p. 55. Directive as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

▼B

96/61/EC of 24 September 1996 concerning integrated pollution prevention and control ([1]) and in particular would not lead to the closure of installations. However, they would require Member States to take all cost-effective abatement measures in the relevant sectors.

(6) In particular, the target values of this Directive are not to be considered as environmental quality standards as defined in Article 2(7) of Directive 96/61/EC and which, according to Article 10 of that Directive, require stricter conditions than those achievable by the use of BAT.

(7) In accordance with Article 176 of the Treaty, Member States may maintain or introduce more stringent protective measures relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons provided that they are compatible with the Treaty and that they are notified to the Commission.

(8) Where concentrations exceed certain assessment thresholds, monitoring of arsenic, cadmium, nickel and benzo(a)pyrene should be mandatory. Supplementary means of assessment may reduce the required number of sampling points for fixed measurements. Further monitoring of background ambient air concentrations and deposition is foreseen.

(9) Mercury is a very hazardous substance for human health and the environment. It is present throughout the environment and, in the form of methylmercury, has the capacity to accumulate in organisms, and in particular to concentrate in organisms higher up the food chain. Mercury released into the atmosphere is capable of being transported over long distances.

(10) The Commission intends to come forward in 2005 with a coherent strategy containing measures to protect human health and the environment from the release of mercury, based on a life-cycle approach, and taking into account production, use, waste treatment and emissions. In this context, the Commission should consider all appropriate measures with a view to reducing the quantity of mercury in terrestrial and aquatic ecosystems, and thereby the ingestion of mercury via food, and avoiding mercury in certain products.

(11) The effects of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons on human health, including via the food chain, and the environment as a whole, occur through concentrations in ambient air and via deposition; the accumulation of these substances in soils and the protection of ground water should be taken into account. In order to facilitate review of this Directive in 2010, the Commission and the Member States should consider promoting research into the effects of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons on human health and the environment, particularly via deposition.

(12) Standardised accurate measurement techniques and common criteria for the location of measuring stations are important elements in assessing ambient air quality so that the information obtained is comparable throughout the Community. Providing reference measurement methods is acknowledged to be an important issue. The Commission has already mandated work on the preparation of CEN standards for the measurement of those constituents in ambient air where target values are defined (arsenic, cadmium, nickel and benzo(a)pyrene) as well as for the deposition of heavy metals with a view to their early development and adoption. In the absence of CEN standard methods, the use of international or national standard reference measurement methods should be permitted.

([1]) OJ L 257, 10.10.1996, p. 26. Directive as last amended by Regulation (EC) No 1882/2003.

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(13) Information on the concentrations and the deposition of the regulated pollutants should be forwarded to the Commission as a basis for regular reports.

(14) Up-to-date information on ambient air concentrations and deposition of regulated pollutants should be readily available to the public.

(15) The Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.

(16) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ([1]).

(17) The amendments necessary for adaptation of this Directive to scientific and technical progress should relate solely to criteria and techniques for the assessment of concentrations and deposition of regulated pollutants or detailed arrangements for forwarding information to the Commission. They should not have the effect of modifying the target values either directly or indirectly,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Objectives

The objectives of this Directive shall be to:

(a) establish a target value for the concentration of arsenic, cadmium, nickel and benzo(a)pyrene in ambient air so as to avoid, prevent or reduce harmful effects of arsenic, cadmium, nickel and polycyclic aromatic hydrocarbons on human health and the environment as a whole;

(b) ensure, with respect to arsenic, cadmium, nickel and polycyclic aromatic hydrocarbons, that ambient air quality is maintained where it is good and that it is improved in other cases;

(c) determine common methods and criteria for the assessment of concentrations of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air as well as of the deposition of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons;

(d) ensure that adequate information on concentrations of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air as well as on the deposition of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons is obtained and ensure that it is made available to the public.

Article 2

Definitions

For the purposes of this Directive the definitions in Article 2 of Directive 96/62/EC, with the exception of the definition of ‘target value’, shall apply.

([1]) OJ L 184, 17.7.1999, p. 23.

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The objectives of this Directive shall be to:

(a) ‘target value’ means a concentration in the ambient air fixed with the aim of avoiding, preventing or reducing harmful effects on human health and the environment as a whole, to be attained where possible over a given period;

(b) ‘total or bulk deposition’ means the total mass of pollutants which is transferred from the atmosphere to surfaces (e.g. soil, vegetation, water, buildings, etc.) in a given area within a given time;

(c) ‘upper assessment threshold’ means a level specified in Annex II below which a combination of measurements and modelling techniques may be used to assess ambient air quality, in accordance with Article 6(3) of Directive 96/62/EC;

(d) ‘lower assessment threshold’ means a level specified in Annex II below which the sole use of modelling or objective estimation techniques shall be possible to assess ambient air quality, in accordance with Article 6(4) of Directive 96/62/EC;

(e) ‘fixed measurements’ means measurements taken at fixed sites either continuously or by random sampling, in accordance with Article 6(5) of Directive 96/62/EC;

(f) ‘arsenic’, ‘cadmium’, ‘nickel’ and ‘benzo(a)pyrene’ mean the total content of these elements and compounds in the PM_{10} fraction;

(g) ‘PM_{10}’ means particulate matter, which passes through a size-selective inlet as defined in EN 12341 with a 50 % efficiency cut-off at 10 μm aerodynamic diameter;

(h) ‘polycyclic aromatic hydrocarbons’ means those organic compounds, composed of at least two fused aromatic rings made entirely from carbon and hydrogen;

(i) ‘total gaseous mercury’ means elemental mercury vapour (Hg^0) and reactive gaseous mercury, i.e. water-soluble mercury species with sufficiently high vapour pressure to exist in the gas phase.

Article 3

Target values

1. Member States shall take all necessary measures not entailing disproportionate costs to ensure that, as from 31 December 2012, concentrations of arsenic, cadmium, nickel and benzo(a)pyrene, used as a marker for the carcinogenic risk of polycyclic aromatic hydrocarbons, in ambient air, as assessed in accordance with Article 4, do not exceed the target values laid down in Annex I.

2. Member States shall draw up a list of zones and agglomerations in which the levels of arsenic, cadmium, nickel, and benzo(a)pyrene are below the respective target values. Member States shall maintain the levels of these pollutants in these zones and agglomerations below the respective target values and shall endeavour to preserve the best ambient air quality, compatible with sustainable development.

3. Member States shall draw up a list of the zones and agglomerations where the target values laid down in Annex I are exceeded.

For such zones and agglomerations, Member States shall specify the areas of exceedance and the sources contributing thereto. In the areas concerned, Member States shall demonstrate the application of all necessary measures not entailing disproportionate costs, directed in particular at the predominant emission sources, in order to attain the target values. In the case of industrial installations covered by Directive 96/61/EC this means the application of BAT as defined by Article 2(11) of that Directive.

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Article 4

Assessment of ambient air concentrations and deposition rates

1. Ambient air quality with respect to arsenic, cadmium, nickel and benzo(a)pyrene shall be assessed throughout the territory of the Member States.

2. In accordance with the criteria referred to in paragraph 7, measurement is mandatory in the following zones:

(a) zones and agglomerations in which levels are between the upper and the lower assessment threshold, and

(b) other zones and agglomerations where levels exceed the upper assessment threshold.

The measurements provided for may be supplemented by modelling techniques to provide an adequate level of information on ambient air quality.

3. A combination of measurements, including indicative measurements as referred to in Annex IV, Section I, and modelling techniques may be used to assess ambient air quality in zones and agglomerations where the levels over a representative period are between the upper and lower assessment thresholds, to be determined pursuant to Annex II, Section II.

4. In zones and agglomerations where the levels are below the lower assessment threshold, to be determined pursuant to Annex II, Section II, the sole use of modelling or objective estimation techniques for assessing levels shall be possible.

5. Where pollutants have to be measured, the measurements shall be taken at fixed sites either continuously or by random sampling. The number of measurements shall be sufficient to enable the levels to be determined.

6. The upper and lower assessment thresholds for arsenic, cadmium, nickel and benzo(a)pyrene in ambient air shall be those laid down in Section I of Annex II. The classification of each zone or agglomeration for the purposes of this Article shall be reviewed at least every five years in accordance with the procedure laid down in Section II of Annex II. Classification shall be reviewed earlier in the event of significant change in activities relevant to concentrations of arsenic, cadmium, nickel and benzo(a)pyrene, in ambient air.

7. The criteria for determining the location of sampling points for the measurement of arsenic, cadmium, nickel and benzo(a)pyrene in ambient air in order to assess compliance with the target values shall be those listed in Sections I and II of Annex III. The minimum number of sampling points for fixed measurements of concentrations of each pollutant shall be as laid down in Section IV of Annex III, and they shall be installed in each zone or agglomeration within which measurement is required if fixed measurement is the sole source of data on concentrations within it.

8. To assess the contribution of benzo(a)pyrene in ambient air, each Member State shall monitor other relevant polycyclic aromatic hydrocarbons at a limited number of measurement sites. These compounds shall include at least: benzo(a)anthracene, benzo(b)fluoranthene, benzo (j)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene. Monitoring sites for these polycyclic aromatic hydrocarbons shall be co-located with sampling sites for benzo(a) pyrene and shall be selected in such a way that geographical variation and long-term trends can be identified. Sections I, II and III of Annex III shall apply.

▼M1

9. Irrespective of concentration levels, one background sampling point shall be installed every 100 000 km^2 for the indicative

▼M1

measurement, in ambient air, of arsenic, cadmium, nickel, total gaseous mercury, benzo(a)pyrene and the other polycyclic aromatic hydrocarbons referred to in paragraph 8, and of the total deposition of arsenic, cadmium, mercury, nickel, benzo(a)pyrene and the other polycyclic aromatic hydrocarbons referred to in paragraph 8. Each Member State shall set up at least one measuring station. However, Member States may, by agreement, and in accordance with guidelines to be drawn up under the regulatory procedure referred to in Article 6(2), set up one or several common measuring stations, covering neighbouring zones in adjoining Member States, to achieve the necessary spatial resolution. Measurement of particulate and gaseous divalent mercury is also recommended. Where appropriate, monitoring shall be coordinated with the European Monitoring and Evaluation of Pollutants (EMEP) monitoring strategy and measurement programme. The sampling sites for these pollutants shall be selected in such a way that geographical variation and long-term trends can be identified. Sections I, II and III of Annex III shall apply.

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10. The use of bio indicators may be considered where regional patterns of the impact on ecosystems are to be assessed.

11. For zones and agglomerations within which information from fixed measurement stations is supplemented by information from other sources, such as emission inventories, indicative measurement methods and air quality modelling, the number of fixed measuring stations to be installed and the spatial resolution of other techniques shall be sufficient for the concentrations of air pollutants to be established in accordance with Section I of Annex III and Section I of Annex IV.

12. Data quality objectives are laid down in Section I of Annex IV. Where air quality models are used for assessment, Section II of Annex IV shall apply.

13. The reference methods for the sampling and analysis of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air shall be as laid down in Sections I, II and III of Annex V. Section IV of Annex V sets out reference techniques for measuring the total deposition of arsenic, cadmium, mercury, nickel and the polycyclic aromatic hydrocarbons and Section V of Annex V refers to reference air quality modelling techniques when such techniques are available.

14. The date by which Member States shall inform the Commission of the methods used for the preliminary assessment of air quality under Article 11(1)(d) of Directive 96/62/EC shall be the date referred to in Article 10 of this Directive.

▼M1

15. Any amendments necessary to adapt the provisions of this Article and of Section II of Annex II and of Annexes III, IV and V to scientific and technical progress shall be adopted by the Commission. Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 6(3). They may not result in any direct or indirect changes to target values.

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Article 5

Transmission of information and reporting

1. With regard to the zones and agglomerations where any of the target values laid down in Annex I is exceeded, Member States shall forward the following information to the Commission:

(a) the lists of the zones and agglomerations concerned,

(b) the areas of exceedance,

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(c) the concentration values assessed,

(d) the reasons for exceedance, and in particular any sources contributing to it,

(e) the population exposed to such exceedance.

Member States shall also report all data assessed in accordance with Article 4, unless already reported under Council Decision 97/101/EC of 27 January 1997 establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States ([1]).

The information shall be transmitted for each calendar year, by no later than 30 September of the following year, and for the first time for the calendar year following 15 February 2007.

2. In addition to the requirements laid down in paragraph 1, Member States shall also report any measures taken pursuant to Article 3.

3. The Commission shall ensure that all information submitted pursuant to paragraph 1 is promptly made available to the public by appropriate means, such as Internet, press and other easily accessible media.

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4. The Commission shall adopt, in accordance with the regulatory procedure referred to in Article 6(2), any detailed arrangements for forwarding the information to be provided under paragraph 1 of this Article.

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Article 6

Committee

1. The Commission shall be assisted by the committee established by Article 12(2) of Directive 96/62/EC.

2. Where reference is made to this Article, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

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3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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Article 7

Public information

1. Member States shall ensure that clear and comprehensible information is accessible and is routinely made available to the public as well as to appropriate organisations, such as environmental organisations, consumer organisations, organisations representing the interests of sensitive populations and other relevant healthcare bodies, on ambient air concentrations of arsenic, cadmium, mercury, nickel and benzo(a)pyrene and the other polycyclic aromatic hydrocarbons referred to in Article 4(8) as well as on deposition rates of arsenic, cadmium, mercury, nickel and benzo(a)pyrene and the other polycyclic aromatic hydrocarbons referred to in Article 4(8).

([1]) OJ L 35, 5.2.1997, p. 14. Decision as amended by Commission Decision 2001/752/EC (OJ L 282, 26.10.2001, p. 69).

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2. The information shall also indicate any annual exceedance of the target values for arsenic, cadmium, nickel and benzo(a)pyrene laid down in Annex I. The information shall give the reasons for the exceedance and the area to which it applies. It shall also provide a short assessment in relation to the target value and appropriate information regarding effects on health and impact on the environment.

Information on any measures taken pursuant to Article 3 shall be made available to the organisations referred to in paragraph 1 of this Article.

3. The information shall be made available by means of, for example, Internet, press and other easily accessible media.

Article 8

Report and review

1. The Commission shall, by 31 December 2010 at the latest, submit to the European Parliament and the Council a report based on:

(a) the experience acquired in the application of this Directive,

(b) in particular, the results of the most recent scientific research concerning the effects on human health, paying particular attention to sensitive populations, and on the environment as a whole, of exposure to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons, and

(c) technological developments including the progress achieved in methods of measuring and otherwise assessing concentrations of these pollutants in ambient air as well as their deposition.

2. The report referred to in paragraph 1 shall take into account:

(a) current air quality, trends and projections up to and beyond 2015;

(b) the scope for making further reductions in polluting emissions from all relevant sources, and the possible merit in introducing limit values aimed at reducing the risk to human health, for the pollutants listed in Annex I, taking account of technical feasibility and cost-effectiveness and any significant additional health and environmental protection that this would provide;

(c) the relationships between pollutants and opportunities for combined strategies for improving Community air quality and related objectives;

(d) current and future requirements for informing the public and for the exchange of information between Member States and Commission;

(e) the experience acquired in the application of this Directive in Member States, and in particular the conditions under which measurement has been carried out as laid down in Annex III;

(f) secondary economic benefits for the environment and health in reducing the emissions of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons to the extent that these can be assessed;

(g) the adequacy of the particle size fraction used for sampling in view of general particulate matter measurement requirements;

(h) the suitability of benzo(a)pyrene as a marker for the total carcinogenic activity of polycyclic aromatic hydrocarbons, having regard to predominantly gaseous forms of polycyclic aromatic hydrocarbons such as fluoranthene.

In the light of the latest scientific and technological developments the Commission shall also examine the effect of arsenic, cadmium and nickel on human health with a view to quantifying their genotoxic carcinogenicity. Taking account of measures adopted pursuant to the mercury strategy the Commission shall also consider whether there

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would be merit in taking further action in relation to mercury, taking account of technical feasibility and cost-effectiveness and any significant additional health and environmental protection that this would provide.

3. With a view to achieving levels of ambient air concentrations that would further reduce harmful effects on human health and would lead to a high level of protection of the environment as a whole, taking into account the technical feasibility and cost-effectiveness of further action, the report referred to in paragraph 1 may be accompanied, if appropriate, by proposals for amendments to this Directive, particularly taking into account the results obtained in accordance with paragraph 2. In addition the Commission shall consider regulating the deposition of arsenic, cadmium, mercury, nickel and specific polycyclic aromatic hydrocarbons.

Article 9

Penalties

Member States shall determine the penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all the measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.

Article 10

Implementation

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 15 February 2007 at the latest. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the texts of the main provisions of national law, which they adopt in the field covered by this Directive.

Article 11

Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union.*

Article 12

Addressees

This Directive is addressed to the Member States.

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ANNEX I

Target values for arsenic, cadmium, nickel and benzo(a)pyrene

Pollutant	Target value (1)
Arsenic	6 ng/m^3
Cadmium	5 ng/m^3
Nickel	20 ng/m^3
Benzo(a)pyrene	1 ng/m^3

(1) For the total content in the PM_{10} fraction averaged over a calendar year.

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ANNEX II

Determination of requirements for assessment of concentrations of arsenic, cadmium, nickel and benzo(a)pyrene in ambient air within a zone or agglomeration

I. **Upper and lower assessment thresholds**

The following upper and lower assessment thresholds will apply:

	Arsenic	Cadmium	Nickel	B(a)P
Upper assessment threshold in percent of the target value	60 % (3,6 ng/m^3)	60 % (3 ng/m^3)	70 % (14 ng/m^3)	60 % (0,6 ng/m^3)
Lower assessment threshold in percent of the target value	40 % (2,4 ng/m^3)	40 % (2 ng/m^3)	50 % (10 ng/m^3)	40 % (0,4 ng/m^3)

II. **Determination of exceedances of upper and lower assessment thresholds**

Exceedances of upper and lower assessment thresholds must be determined on the basis of concentrations during the previous five years where sufficient data are available. An assessment threshold will be deemed to have been exceeded if it has been exceeded during at least three calendar years out of those previous five years.

Where fewer than five years' data are available, Member States may combine measurement campaigns of short duration during the period of the year and at locations likely to be typical of the highest pollution levels with results obtained from information from emission inventories and modelling to determine exceedances of the upper and lower assessment thresholds.

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ANNEX III

Location and minimum number of sampling points for the measurement of concentrations in ambient air and deposition rates

I. **Macroscale siting**

The sites of sampling points should be selected in such a way as to:

— provide data on the areas within zones and agglomerations where the population is likely to be directly or indirectly exposed to the highest concentrations averaged over a calendar year;

— provide data on levels in other areas within zones and agglomerations which are representative of the exposure of the general population;

— provide data on deposition rates representing the indirect exposure of the population through the food chain.

Sampling points should in general be sited so as to avoid measuring very small micro-environments in their immediate vicinity. As a guideline, a sampling point should be representative of air quality in surrounding areas of no less than 200 m^2 at traffic-orientated sites, at least 250 m × 250 m at industrial sites, where feasible, and several square kilometres at urban-background sites.

Where the objective is to assess background levels the sampling site should not be influenced by agglomerations or industrial sites in its vicinity, i.e. sites closer than a few kilometres.

Where contributions from industrial sources are to be assessed, at least one sampling point shall be installed downwind of the source in the nearest residential area. Where the background concentration is not known, an additional sampling point shall be situated within the main wind direction. In particular where Article 3(3) applies, the sampling points should be sited such that the application of BAT can be monitored.

Sampling points should also, where possible, be representative of similar locations not in their immediate vicinity. Where appropriate they should be co-located with sampling points for PM_{10}.

II. **Microscale siting**

The following guidelines should be met as far as practicable:

— the flow around the inlet sampling probe should be unrestricted, without any obstructions affecting the airflow in the vicinity of the sampler (normally some metres away from buildings, balconies, trees and other obstacles and at least 0,5 m from the nearest building in the case of sampling points representing air quality at the building line);

— in general, the inlet sampling point should be between 1,5 m (the breathing zone) and 4 m above the ground. Higher positions (up to 8 m) may be necessary in some circumstances. Higher siting may also be appropriate if the station is representative of a large area;

— the inlet probe should not be positioned in the immediate vicinity of sources in order to avoid direct intake of emissions unmixed with ambient air;

— the sampler's exhaust outlet should be positioned so that recirculation of exhaust air to the sample inlet is avoided;

— traffic-orientated sampling points should be at least 25 metres from the edge of major junctions and at least 4 m from the centre of the nearest traffic lane; inlets should be sited so as to be representative of air quality near the building line;

— for the deposition measurements in rural background areas, the EMEP guidelines and criteria should be applied as far as practicable and where not provided for in the Annexes.

The following factors may also be taken into account:

— interfering sources

— security

— access

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— availability of electrical power and telephone communications

— visibility of the site in relation to its surroundings

— safety of the public and operators

— the desirability of co-locating sampling points for different pollutants

— planning requirements.

III. **Documentation and review of site selection**

The site selection procedures should be fully documented at the classification stage by such means as compass-point photographs of the surrounding area and a detailed map. Sites should be reviewed at regular intervals with repeated documentation to ensure that selection criteria remain valid over time.

IV. **Criteria for determining numbers of sampling points for fixed measurement of concentrations of arsenic, cadmium, nickel and benzo (a)pyrene in ambient air**

Minimum number of sampling points for fixed measurement to assess compliance with target values for the protection of human health in zones and agglomerations where fixed measurement is the sole source of information.

(a) *Diffuse sources*

Population of agglomeration or zone (thousands)	If maximum concentrations exceed the upper assessment threshold (1)		If maximum concentrations are between the upper and lower assessment thresholds	
	As, Cd, Ni	B(a)P	As, Cd, Ni	B(a)P
0–749	1	1	1	1
750–1 999	2	2	1	1
2 000–3 749	2	3	1	1
3 750–4 749	3	4	2	2
4 750–5 999	4	5	2	2
≥ 6 000	5	5	2	2

(1) To include at least one urban-background station and for benzo(a)pyrene also one traffic-oriented station provided this does not increase the number of sampling points.

(b) *Point sources*

For the assessment of pollution in the vicinity of point sources, the number of sampling points for fixed measurement should be determined taking into account emission densities, the likely distribution patterns of ambient air pollution and potential exposure of the population.

The sampling points should be sited such that the application of BAT as defined by Article 2(11) of Directive 96/61/EC can be monitored.

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ANNEX IV

Data quality objectives and requirements for air quality models

I. **Data quality objectives**

The following data quality objectives are provided as a guide to quality assurance.

	Benzo(a)pyrene	Arsenic, cadmium and nickel	Polycyclic aromatic hydrocarbons other than benzo(a) pyrene, total gaseous mercury	Total deposition
— Uncertainty				
Fixed and indicative measurements	50 %	40 %	50 %	70 %
Modelling	60 %	60 %	60 %	60 %
— Minimum data capture	90 %	90 %	90 %	90 %
— Minimum time coverage:				
Fixed measurements	33 %	50 %		
Indicative measurements (*)	14 %	14 %	14 %	33 %

(*) Indicative measurement being measurements which are performed at reduced regularity but fulfil the other data quality objectives.

The uncertainty (expressed at a 95 % confidence level) of the methods used for the assessment of ambient air concentrations will be evaluated in accordance with the principles of the CEN Guide to the expression of uncertainty in measurement (ENV 13005-1999), the methodology of ISO 5725:1994, and the guidance provided in the CEN Report, 'Air quality — Approach to uncertainty estimation for ambient air reference measurement methods' (CR 14377:2002E). The percentages for uncertainty are given for individual measurements, which are averaged over typical sampling times, for a 95 % confidence interval. The uncertainty of the measurements should be interpreted as being applicable in the region of the appropriate target value. Fixed and indicative measurements must be evenly distributed over the year in order to avoid skewing of results.

The requirements for minimum data capture and time coverage do not include losses of data due to regular calibration or normal maintenance of the instrumentation. Twenty-four-hour sampling is required for the measurement of benzo(a)pyrene and other polycyclic aromatic hydrocarbons. With care, individual samples taken over a period of up to one month can be combined and analysed as a composite sample, provided the method ensures that the samples are stable for that period. The three congeners benzo(b) fluoranthene, benzo(j)fluoranthene, benzo(k)fluoranthene can be difficult to resolve analytically. In such cases they can be reported as sum. Twenty-four hour sampling is also advisable for the measurement of arsenic, cadmium and nickel concentrations. Sampling must be spread evenly over the weekdays and the year. For the measurement of deposition rates monthly, or weekly, samples throughout the year are recommended.

Member States may use wet only instead of bulk sampling if they can demonstrate that the difference between them is within 10 %. Deposition rates should generally be given as $\mu g/m^2$ per day.

Member States may apply a minimum time coverage lower than indicated in the table, but not lower than 14 % for fixed measurements and 6 % for indicative measurements provided that they can demonstrate that the 95 % expanded uncertainty for the annual mean, calculated from the data quality objectives in the table according to ISO 11222:2002 — 'Determination of the uncertainty of the time average of air quality measurements' will be met.

II. **Requirements for air quality models**

Where an air quality model is used for assessment, references to descriptions of the model and information on the uncertainty shall be compiled. The uncertainty for modelling is defined as the maximum deviation of the

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measured and calculated concentration levels, over a full year, without taking into account the timing of the events.

III. **Requirements for objective estimation techniques**

Where objective estimation techniques are used, the uncertainty shall not exceed 100 %.

IV. **Standardisation**

For substances to be analysed in the PM_{10} fraction, the sampling volume refers to ambient conditions.

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ANNEX V

Reference methods for assessment of concentrations in ambient air and deposition rates

I. **Reference method for the sampling and analysis of arsenic, cadmium and nickel in ambient air**

The reference method for the measurement of arsenic, cadmium and nickel concentrations in ambient air is currently being standardised by CEN and shall be based on manual PM_{10} sampling equivalent to EN 12341, followed by digestion of the samples and analysis by Atomic Absorption Spectrometry or ICP Mass Spectrometry. In the absence of a CEN standard method, Member States are allowed to use national standard methods or ISO standard methods.

A Member State may also use any other methods which it can demonstrate give results equivalent to the above method.

II. **Reference method for the sampling and analysis of polycyclic aromatic hydrocarbons in ambient air**

The reference method for the measurement of benzo(a)pyrene concentrations in ambient air is currently being standardised by CEN and shall be based on manual PM_{10} sampling equivalent to EN 12341. In the absence of a CEN standard method, for benzo(a)pyrene or the other polycyclic aromatic hydrocarbons referred to in Article 4(8), Member States are allowed to use national standard methods or ISO methods such as ISO standard 12884.

A Member State may also use any other methods which it can demonstrate give results equivalent to the above method.

III. **Reference method for the sampling and analysis of mercury in ambient air**

The reference method for the measurement of total gaseous mercury concentrations in ambient air shall be an automated method based on Atomic Absorption Spectrometry or Atomic Fluorescence Spectrometry. In the absence of a CEN standardised method, Member States are allowed to use national standard methods or ISO standard methods.

A Member State may also use any other methods which it can demonstrate give results equivalent to the above method.

IV. **Reference method for the sampling and analysis of the deposition of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons**

The reference method for the sampling of deposited arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons shall be based on the exposition of cylindrical deposit gauges with standardised dimensions. In the absence of a CEN standardised method, Member States are allowed to use national standard methods.

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V. **Reference air quality modelling techniques**

Reference air quality modelling techniques cannot be specified at present. The Commission may make amendments to adapt this point to scientific and technical progress. Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 6(3).

►B DIRECTIVE 2001/81/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 23 October 2001

on national emission ceilings for certain atmospheric pollutants

(OJ L 309, 27.11.2001, p. 22)

Amended by:

		Official Journal		
		No	page	date
►M1	Council Directive 2006/105/EC of 20 November 2006	L 363	368	20.12.2006
►M2	Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009	L 87	109	31.3.2009

Amended by:

►A1	Act concerning the conditions of accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic and the adjustments to the Treaties on which the European Union is founded	L 236	33	23.9.2003

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DIRECTIVE 2001/81/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 23 October 2001

on national emission ceilings for certain atmospheric pollutants

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission ([1]),

Having regard to the Opinion of the Economic and Social Committee ([2]),

Having regard to the Opinion of the Committee of the Regions ([3]),

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([4]), in the light of the joint text approved by the Conciliation Committee on 2 August 2001,

Whereas:

(1) The general approach and strategy of the Fifth Environmental Action Programme was approved by the Resolution of 1 February 1993 of the Council and the Representatives of the Governments of the Member States meeting within the Council on a Community programme of policy and action in relation to the environment and sustainable development ([5]) and it sets as objectives that critical loads and levels for acidification in the Community are not to be exceeded. The programme requires that all people should be effectively protected against health risks from air pollution and that permitted levels of pollution should take account of the protection of the environment. The programme also requires that guideline values from the World Health Organisation (WHO) should become mandatory at Community level.

(2) The Member States have signed the Gothenburg Protocol of 1 December 1999 to the United Nations Economic Commission for Europe (UNECE) Convention on long-range transboundary air pollution to abate acidification, eutrophication and ground-level ozone.

(3) Decision No 2179/98/EC of the European Parliament and of the Council of 24 September 1998 on the review of the European Community programme of policy and action in relation to the environment and sustainable development 'Towards sustainability' ([6]) specified that particular attention should be given to developing and implementing a strategy with the goal of ensuring

([1]) OJ C 56 E, 29.2.2000, p. 34.
([2]) OJ C 51, 23.2.2000, p. 11.
([3]) OJ C 317, 6.11.2000, p. 35.
([4]) Opinion of the European Parliament of 15 March 2000 (OJ C 377, 29.12.2000, p. 159), Council Common Position of 7 November 2000 (OJ C 375, 28.12.2000, p. 1) and Decision of the European Parliament of 14 March 2001 (not yet published in the Official Journal). Decision of the European Parliament of 20 September 2001 and Decision of the Council of 27 September 2001.
([5]) OJ C 138, 17.5.1993, p. 1.
([6]) OJ L 275, 10.10.1998, p. 1.

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that critical loads, in relation to exposure to acidifying, eutrophying and photochemical air pollutants, are not exceeded.

(4) Council Directive 92/72/EEC of 21 September 1992 on air pollution by ozone [1] requires the Commission to submit to the Council a report on the evaluation of photochemical pollution in the Community, accompanied by any proposals the Commission deems appropriate on the control of air pollution by ground-level ozone and, if necessary, on reducing emissions of ozone precursors.

(5) Significant areas of the Community are exposed to depositions of acidifying and eutrophying substances at levels which have adverse effects on the environment. The WHO guideline values for the protection of human health and vegetation from photochemical pollution are substantially exceeded in all Member States.

(6) The exceedance of critical loads should therefore be gradually eliminated and guideline levels respected.

(7) At present it is not technically feasible to meet the long-term objectives of eliminating the adverse effects of acidification and reducing exposure to ground-level ozone of man and the environment to the guideline values established by the WHO. It is therefore necessary to provide for interim environmental objectives for acidification and ground-level ozone pollution, on which the necessary measures to reduce such pollution are to be based.

(8) Interim environmental objectives and the measures to meet them should take account of technical feasibility and the associated costs and benefits. Such measures should ensure that any action taken is cost-effective for the Community as a whole and should take account of the need to avoid excessive costs for any individual Member State.

(9) Transboundary pollution contributes to acidification, soil eutrophication and ground-level ozone formation, the abatement of which requires coordinated Community action.

(10) Reducing emissions of the pollutants causing acidification and exposure to ground-level ozone will also reduce soil eutrophication.

(11) A set of national ceilings for each Member State for emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia is a cost-effective way of meeting interim environmental objectives. Such emission ceilings will allow the Community and the Member States flexibility in determining how to comply with them.

(12) Member States should be responsible for implementing measures to comply with national emission ceilings. It will be necessary to evaluate progress towards compliance with the emission ceilings. National programmes for the reduction of emissions should therefore be drawn up and reported on to the Commission and should include information on the measures adopted or envisaged to comply with the emission ceilings.

(13) In accordance with the principle of subsidiarity as set out in Article 5 of the Treaty and taking account, in particular, of the precautionary principle, the objective of this Directive, namely limitation of emissions of acidifying and eutrophying pollutants and ozone precursors, cannot be sufficiently achieved by the Member States because of the transboundary nature of the pollution and can therefore be better achieved by the Community; in accordance with the principle of proportionality

[1] OJ L 297, 13.10.1992, p. 1.

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this Directive does not go beyond what is necessary to achieve that purpose.

(14) There should be a timely review of the progress made by Member States towards the emission ceilings, as well as a review of the extent to which implementing the ceilings is likely to meet interim environmental objectives, for the Community as a whole. Such review should consider also scientific and technical progress, developments in Community legislation and emission reductions outside the Community with special regard to progress made inter alia by the accession candidate countries. In that review, the Commission should undertake a further examination of the costs and benefits of the emission ceilings, including their cost-effectiveness, marginal costs and benefits and socio-economic impact and any impact on competitiveness. The review should also consider the limitations on the scope of this Directive.

(15) The Commission should for this purpose prepare a report to the European Parliament and the Council and, if it considers it necessary, propose appropriate amendments to this Directive taking account of the effects of any relevant Community legislation *inter alia* setting emission limits and product standards for relevant sources of emissions and international regulations concerning ship and aircraft emissions.

(16) Sea transport is a significant contributor to emissions of sulphur dioxide and nitrogen oxides and also to concentrations and depositions of air pollutants in the Community. Such emissions should therefore be reduced. Article 7(3) of Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC [1] requires the Commission to consider which measures could be taken to reduce the contribution to acidification of the combustion of marine fuels other than those specified in Article 2(3) of that Directive.

(17) Member States should seek to ratify Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL) as soon as possible.

(18) Owing to the transboundary nature of acidification and ozone pollution, the Commission should continue to examine further the need to develop harmonised Community measures, without prejudice to Article 18 of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control [2], with the aim of avoiding distortion of competition, and taking into account the balance between benefits and cost of action.

(19) The provisions of this Directive should apply without prejudice to the Community legislation regulating emissions of those pollutants from specific sources and to the provisions of Council Directive 96/61/EC in relation to emission limit values and use of best available techniques.

(20) Emission inventories are necessary to monitor progress towards compliance with the emission ceilings and must be calculated in accordance with internationally agreed methodology and reported on regularly to the Commission and the European Environment Agency (EEA).

(21) Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. The penalties should be effective, proportionate and dissuasive.

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[1] OJ L 121, 11.5.1999, p. 13.
[2] OJ L 257, 10.10.1996, p. 26.

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(22) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ([1]).

(23) The Commission and Members States should cooperate internationally with a view to achieving the objectives of this Directive,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Objective

The aim of this Directive is to limit emissions of acidifying and eutrophying pollutants and ozone precursors in order to improve the protection in the Community of the environment and human health against risks of adverse effects from acidification, soil eutrophication and ground-level ozone and to move towards the long-term objectives of not exceeding critical levels and loads and of effective protection of all people against recognised health risks from air pollution by establishing national emission ceilings, taking the years 2010 and 2020 as benchmarks, and by means of successive reviews as set out in Articles 4 and 10.

Article 2

Scope

This Directive covers emissions in the territory of the Member States and their exclusive economic zones from all sources of the pollutants referred to in Article 4 which arise as a result of human activities.

It does not cover:

(a) emissions from international maritime traffic;

(b) aircraft emissions beyond the landing and take-off cycle;

(c) for Spain, emissions in the Canary Islands;

(d) for France, emissions in the overseas departments;

(e) for Portugal, emissions in Madeira and the Azores.

Article 3

Definitions

For the purposes of this Directive:

(a) ‘AOT 40’ means the sum of the difference between hourly concentrations of ground-level ozone greater than 80 μg/m^3 (= 40 ppb) and 80 μg/m^3 during daylight hours accumulated from May to July each year;

(b) ‘AOT 60’ means the sum of the difference between hourly concentrations of ground-level ozone greater than 120 μg/m^3 (=60 ppb) and 120 μg/m^3 accumulated throughout the year;

(c) ‘critical load’ means a quantitative estimate of an exposure to one or more pollutants below which significant adverse effects on specified sensitive elements of the environment do not occur, according to present knowledge;

([1]) OJ L 184, 17.7.1999, p. 23.

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(d) ‘critical level’ means the concentration of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur, according to present knowledge;

(e) ‘emission’ means the release of a substance from a point or diffuse source into the atmosphere;

(f) ‘grid cell’ means a square 150 km x 150 km, which is the resolution used when mapping critical loads on a European scale, and also when monitoring emissions and depositions of air pollutants under the Cooperative Programme for Monitoring and Evaluation of the long-range Transmission of Air Pollutants in Europe (EMEP);

(g) ‘landing and take-off cycle’ means a cycle represented by the following time in each operating mode: approach 4,0 minutes; taxi/-ground idle 26,0 minutes, take-off 0,7 minutes; climb 2,2 minutes;

(h) ‘national emission ceiling’ means the maximum amount of a substance expressed in kilotonnes, which may be emitted from a Member State in a calendar year;

(i) ‘nitrogen oxides’ and ‘NO_x’ mean nitric oxide and nitrogen dioxide, expressed as nitrogen dioxide;

(j) ‘ground-level ozone’ means ozone in the lowermost part of the troposphere;

(k) ‘volatile organic compounds’ and ‘VOC’ mean all organic compounds arising from human activities, other than methane, which are capable of producing photochemical oxidants by reactions with nitrogen oxides in the presence of sunlight.

Article 4

National emission ceilings

1. By the year 2010 at the latest, Member States shall limit their annual national emissions of the pollutants sulphur dioxide (SO_2), nitrogen oxides (NO_x), volatile organic compounds (VOC) and ammonia (NH_3) to amounts not greater than the emission ceilings laid down in Annex I, taking into account any modifications made by Community measures adopted following the reports referred to in Article 9.

2. Member States shall ensure that the emission ceilings laid down in Annex I are not exceeded in any year after 2010.

Article 5

Interim environmental objectives

The national emission ceilings in Annex I shall have as their purpose to meet broadly the following interim environmental objectives, for the Community as a whole, by 2010:

(a) *Acidification*

The areas where critical loads are exceeded shall be reduced by at least 50 % (in each grid cell) compared with the 1990 situation.

(b) *Health-related ground-level ozone exposure*

The ground-level ozone load above the critical level for human health (AOT60=0) shall be reduced by two-thirds in all grid cells compared with the 1990 situation. In addition, the ground-level ozone load shall not exceed an absolute limit of 2,9 ppm.h in any grid cell.

(c) *Vegetation-related ground-level ozone exposure*

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The ground-level ozone load above the critical level for crops and semi-natural vegetation (AOT40=3 ppm.h) shall be reduced by one-third in all grid cells compared with the 1990 situation. In addition, the ground-level ozone load shall not exceed an absolute limit of 10 ppm.h, expressed as an exceedance of the critical level of 3 ppm.h in any grid cell.

Article 6

National programmes

1. Member States shall, by 1 October 2002 at the latest, draw up programmes for the progressive reduction of national emissions of the pollutants referred to in Article 4 with the aim of complying at least with the national emission ceilings laid down in Annex I by 2010 at the latest.

2. The national programmes shall include information on adopted and envisaged policies and measures and quantified estimates of the effect of these policies and measures on emissions of the pollutants in 2010. Anticipated significant changes in the geographical distribution of national emissions shall be indicated.

3. Member States shall update and revise the national programmes as necessary by 1 October 2006.

4. Member States shall make available to the public and to appropriate organisations such as environmental organisations the programmes drawn up in accordance with paragraphs 1, 2 and 3. Information made available to the public and to organisations under this paragraph shall be clear, comprehensible and easily accessible.

Article 7

Emission inventories and projections

1. Member States shall prepare and annually update national emission inventories and emission projections for 2010 for the pollutants referred to in Article 4.

2. Member States shall establish their emission inventories and projections using the methodologies specified in Annex III.

3. The Commission, assisted by the European Environment Agency, shall, in cooperation with the Member States and on the basis of the information provided by them, establish inventories and projections of the pollutants referred to in Article 4. The inventories and projections shall be made publicly available.

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4. Any updating of the methodologies to be used in accordance with Annex III shall be adopted by the Commission. Those measures, designed to amend non-essential elements of this Directive, *inter alia,* by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 13(3).

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Article 8

Reports by the Member States

1. Member States shall each year, by 31 December at the latest, report their national emission inventories and their emission projections for 2010 established in accordance with Article 7 to the Commission and the European Environment Agency. They shall report their final emission inventories for the previous year but one and their provisional emission inventories for the previous year. Emission projections shall

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include information to enable a quantitative understanding of the key socioeconomic assumptions used in their preparation.

2. Member States shall, by 31 December 2002 at the latest, inform the Commission of the programmes drawn up in accordance with Article 6(1) and (2).

Member States shall, by 31 December 2006 at the latest, inform the Commission of the updated programmes drawn up in accordance with Article 6(3).

3. The Commission shall forward the national programmes received to the other Member States within one month of their reception.

4. The Commission shall, in accordance with the procedure set out in Article 13(2), establish provisions to ensure consistent and transparent reporting of national programmes.

Article 9

Reports by the Commission

1. In 2004 and 2008 the Commission shall report to the European Parliament and the Council on progress on the implementation of the national emission ceilings laid down in Annex I and on the extent to which the interim environmental objectives set out in Article 5 are likely to be met by 2010 and on the extent to which the long-term objectives set out in Article 1 could be met by 2020. The reports shall include an economic assessment, including cost-effectiveness, benefits, an assessment of marginal costs and benefits and the socioeconomic impact of the implementation of the national emission ceilings on particular Member States and sectors. They shall also include a review of the limitations of the scope of this Directive as defined in Article 2 and an evaluation of the extent to which further emission reductions might be necessary in order to meet the interim environmental objectives set out in Article 5. They shall take into account the reports made by Member States pursuant to Article 8(1) and (2), as well as, *inter alia*:

(a) any new Community legislation which may have been adopted setting emission limits and product standards for relevant sources of emissions;

(b) developments of best available techniques in the framework of the exchange of information under Article 16 of Directive 96/61/EC;

(c) emission reduction objectives for 2008 for emissions of sulphur dioxide and nitrogen oxides from existing large combustion plants, reported by Member States pursuant to Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants ([1]);

(d) emission reductions and reduction commitments by third countries, with particular focus on measures to be taken in the accession candidate countries, and the possibility for further emission reductions in regions in the vicinity of the Community;

(e) any new Community legislation and any international regulations concerning ship and aircraft emissions;

(f) the development of transport and any further action to control transport emissions;

(g) developments in the field of agriculture, new livestock projections and improvements in emission reduction methods in the agricultural sector;

([1]) See p. 1 of this edition of the Official Journal.

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(h) any major changes in the energy supply market within a Member State and new forecasts reflecting the actions taken by Member States to comply with their international obligations in relation to climate change;

(i) assessment of the current and projected exceedances of critical loads and the WHO's guideline values for ground-level ozone;

(j) the possibility of identification of a proposed interim objective for reducing soil eutrophication;

(k) new technical and scientific data including an assessment of the uncertainties in:

(i) national emission inventories;

(ii) input reference data;

(iii) knowledge of the transboundary transport and deposition of pollutants;

(iv) critical loads and levels;

(v) the model used;

and an assessment of the resulting uncertainty in the national emission ceilings required to meet the interim environmental objectives mentioned in Article 5.

(l) whether there is a need to avoid excessive costs for any individual Member State;

(m) a comparison of model calculations with observations of acidification, eutrophication and ground-level ozone with a view to improving models;

(n) the possible use, where appropriate, of relevant economic instruments.

2. In 2012 the Commission shall report to the European Parliament and the Council on compliance with the ceilings in Annex I and on progress in relation to the interim environmental objectives in Article 5 and the long-term objectives set out in Article 1. Its report shall take account of the reports made by Member States pursuant to Article 8(1) and (2) as well as the matters listed in points (a) to (n) of paragraph 1.

Article 10

Review

1. The reports referred to in Article 9 shall take into account the factors listed in Article 9(1). In the light of these factors, of progress towards attaining the emission ceilings by the year 2010, of scientific and technical progress, and of the situation regarding progress towards attaining the interim objectives of this Directive and the long-term objectives of no exceedance of critical loads and levels and of WHO air quality guidelines for ozone, the Commission shall carry out a review of this Directive in preparation for each report.

2. In the review to be completed in 2004 an evaluation will be carried out of the indicative emission ceilings for the Community as a whole set out in Annex II. The evaluation of these indicative ceilings shall be a factor for consideration during analysis of further cost-effective actions that might be taken in order to reduce emissions of all relevant pollutants, with the aim of attaining the interim environmental objectives set out in Article 5, for the Community as a whole by 2010.

3. All reviews shall include a further investigation of the estimated costs and benefits of national emission ceilings, computed with state-of-the-art models and making use of the best available data to achieve the

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least possible uncertainty and taking also into account progress in the enlargement of the European Union, and of the merits of alternative methodologies, in the light of the factors listed in Article 9.

4. Without prejudice to Article 18 of Directive 96/61/EC, with the aim of avoiding distortion of competition, and taking into account the balance between benefits and costs of action, the Commission shall examine further the need to develop harmonised Community measures, for the most relevant economic sectors and products contributing to acidification, eutrophication and formation of ground-level ozone.

5. The reports referred to in Article 9 will, if appropriate, be accompanied by proposals for:

(a) modifications of the national ceilings in Annex I with the aim of meeting the interim environmental objectives of Article 5 and/or for modifications to those interim environmental objectives;

(b) possible further emission reductions with the aim of meeting, preferably by 2020, the long-term objectives of this Directive;

(c) measures to ensure compliance with the ceilings.

Article 11

Cooperation with third countries

To promote the achievement of the objective set out in Article 1, the Commission and Member States, as appropriate, shall, without prejudice to Article 300 of the Treaty, pursue bilateral and multilateral cooperation with third countries and relevant international organisations such as the United Nations Economic Commission for Europe (UNECE), the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO), including through the exchange of information, concerning technical and scientific research and development and with the aim of improving the basis for the facilitation of emission reductions.

Article 12

Reports concerning ship and aircraft emission

1. By the end of 2002 the Commission shall report to the European Parliament and Council on the extent to which emissions from international maritime traffic contribute to acidification, eutrophication and the formation of ground-level ozone within the Community.

2. By the end of 2004 the Commission shall report to the European Parliament and Council on the extent to which emissions from aircraft beyond the landing and take-off cycle contribute to acidification, eutrophication and the formation of ground-level ozone within the Community.

3. Each report shall specify a programme of actions which could be taken at international and Community level as appropriate to reduce emissions from the sector concerned, as a basis for further consideration by the European Parliament and Council.

Article 13

Committee

1. The Commission shall be assisted by the Committee set up by Article 12 of Directive 96/62/EC, hereinafter referred to as ‘the Committee’.

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2. Where reference is made to this paragraph, Articles 4 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period referred to in Article 4(3) of Decision 1999/468/EC shall be set at three months.

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3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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Article 14

Penalties

Member States shall determine the penalties applicable to breaches of the national provisions adopted pursuant to this Directive. The penalties shall be effective, proportionate and dissuasive.

Article 15

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 27 November 2002. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law, which they adopt in the field covered by this Directive.

Article 16

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

Article 17

Addressees

This Directive is addressed to the Member States.

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ANNEX I

National emission ceilings for SO_2, NO_x, VOC and NH_3, to be obtained by 2010 (1)

Country	SO_2 Kilotonnes	NO_x Kilotonnes	VOC Kilotonnes	NH_3 Kilotonnes
Belgium	99	176	139	74
Bulgaria (2)	836	247	175	108
Czech Republic	265	286	220	80
Denmark	55	127	85	69
Germany	520	1 051	995	550
Estonia	100	60	49	29
Greece	523	344	261	73
Spain	746	847	662	353
France	375	810	1 050	780
Ireland	42	65	55	116
Italy	475	990	1 159	419
Cyprus	39	23	14	09
Latvia	101	61	136	44
Lithuania	145	110	92	84
Luxembourg	4	11	9	7
Hungary	500	198	137	90
Malta	9	8	12	3
Netherlands	50	260	185	128
Austria	39	103	159	66
Poland	1 397	879	800	468
Portugal	160	250	180	90
Romania (2)	918	437	523	210
Slovenia	27	45	40	20
Slovakia	110	130	140	39
Finland	110	170	130	31
Sweden	67	148	241	57
United Kingdom	585	1 167	1 200	297
EC 27	8 297	9 003	8 848	4 294

(1) These national emission ceilings are designed with the aim of broadly meeting the interim environmental objectives set out in Article 5. Meeting those objectives is expected to result in a reduction of soil eutrophication to such an extent that the Community area with depositions of nutrient nitrogen in excess of the critical loads will be reduced by about 30 % compared with the situation in 1990.

(2) These national emission ceilings are temporary and are without prejudice to the review according to Article 10 of this Directive, which is to be completed in 2008.

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ANNEX II

Emission ceilings for SO_2, NO_x and VOC (thousand tonnes)

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	SO_2 Kilotonnes	NO_x Kilotonnes	VOC Kilotonnes
EC 27 ([1])	7 832	8 180	7 585

([1]) These emission ceilings are temporary and are without prejudice to the review according to Article 10 of this Directive, which is to be completed in 2008.

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These emission ceilings are designed with the aim of attaining the interim environmental objectives set out in Article 5 for the Community as a whole by 2010.

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ANNEX III

Methodologies for emission inventories and projections

Member States shall establish emission inventories and projections using the methodologies agreed upon by the Convention on Long-range Transboundary Air Pollution and are requested to use the joint EMEP/CORINAIR (*) guidebook in preparing these inventories and projections.

(*) Air emissions inventory of the European Environment Agency.

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(Acts whose publication is obligatory)

REGULATION (EC) No 166/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 18 January 2006

concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee ([1]),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([2]),

Whereas:

(1) The Sixth Community Environment Action Programme adopted by Decision No 1600/2002/EC of the European Parliament and of the Council ([3]) requires supporting the provision of accessible information to citizens on the state and trends of the environment in relation to social, economic and health trends as well as the general raising of environmental awareness.

(2) The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (hereinafter 'the Aarhus Convention'), signed by the European Community on 25 June 1998, recognises that increased public access to environmental information and the dissemination of such information contribute to a greater awareness of environmental matters, a free exchange of views, more effective participation by the public in environmental decision-making and, eventually, to a better environment.

(3) Pollutant release and transfer registers (hereinafter 'PRTRs') are a cost-effective tool for encouraging improvements in environmental performance, for providing public access to information on releases of pollutants and off-site transfers of pollutants and waste, and for use in tracking trends, demonstrating progress in pollution reduction, monitoring compliance with certain international agreements, setting priorities and evaluating progress achieved through Community and national environmental policies and programmes.

(4) An integrated and coherent PRTR gives the public, industry, scientists, insurance companies, local authorities, non-governmental organisations and other decision-makers a solid database for comparisons and future decisions in environmental matters.

(5) On 21 May 2003 the European Community signed the UNECE Protocol on Pollutant Release and Transfer Registers (hereinafter 'the Protocol'). Provisions of Community law should be consistent with that Protocol with a view to its conclusion by the Community.

(6) A European Pollutant Emission Register (hereinafter 'EPER') was established by Commission Decision 2000/479/EC ([4]). The Protocol builds on the same principles as EPER, but goes beyond, by including reporting on more pollutants, more activities, releases to land, releases from diffuse sources and off-site transfers.

(7) The objectives and goals pursued by a European PRTR can only be achieved if data are reliable and comparable. An adequate harmonisation of the data collection and transfer system is therefore needed to ensure the quality and comparability of data. In accordance with the Protocol the European PRTR should be designed for maximum ease of public access through the Internet. Releases and transfers should be easily identified in different aggregated and non-aggregated forms in order to access a maximum of information in a reasonable time.

([1]) Opinion of 6 April 2005 (not yet published in the Official Journal).

([2]) Opinion of the European Parliament of 6 July 2005 (not yet published in the Official Journal) and Decision of the Council of 2 December 2005.

([3]) OJ L 242, 10.9.2002, p. 1.

([4]) OJ L 192, 28.7.2000, p. 36.

(8) In order to further promote the objective of supporting the provision of accessible information to citizens on the state and trends of the environment as well as the general raising of environmental awareness, the European PRTR should contain links to other similar databases in Member States, non-Member States and international organisations.

(9) In accordance with the Protocol, the European PRTR should also contain information on specific waste disposal operations, to be reported as releases to land; recovery operations such as sludge and manure spreading are not reported under this category.

(10) In order to achieve the objective of the European PRTR to provide reliable information to the public and to allow for knowledge-based decisions it is necessary to provide for reasonable but strict timeframes for data collection and reporting; this is particularly relevant for reporting by Member States to the Commission.

(11) Reporting of releases from industrial facilities, although not yet always consistent, complete and comparable, is a well established procedure in many Member States. Where appropriate, reporting on releases from diffuse sources should be improved in order to enable decision-makers to better put into context those releases and to choose the most effective solution for pollution reduction.

(12) Data reported by the Member States should be of high quality in particular as regards their completeness, consistency and credibility. It is of great importance to coordinate future efforts of both operators and Member States to improve the quality of the reported data. The Commission will therefore initiate work, together with the Member States, on quality assurance.

(13) In accordance with the Aarhus Convention, the public should be granted access to the information contained in the European PRTR without an interest to be stated, primarily by ensuring that the European PRTR provides for direct electronic access through the Internet.

(14) Access to information provided by the European PRTR should be unrestricted and exceptions from this rule should only be possible where explicitly granted by existing Community legislation.

(15) In accordance with the Aarhus Convention, public participation should be ensured in the further development of the European PRTR by early and effective opportunities to submit comments, information, analysis or relevant opinions for the decision-making process. Applicants should be able to seek an administrative or judicial review of the acts or omissions of a public authority in relation to a request.

(16) In order to enhance the usefulness and impact of the European PRTR, the Commission and the Member States should cooperate in developing guidance supporting the implementation of the European PRTR, in promoting awareness of the public and in providing appropriate and timely technical assistance.

(17) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission [1].

(18) Since the objective of the action to be taken, namely to enhance public access to environmental information through the establishment of an integrated, coherent Community-wide electronic database, cannot be sufficiently achieved by the Member States, because the need for comparability of data throughout the Member States argues for a high level of harmonisation, and can therefore be better achieved at Community level, the Community may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.

(19) In order to simplify and streamline reporting requirements, Council Directive 91/689/EEC of 12 December 1991 on hazardous waste [2] and Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control [3] should be amended.

(20) The European PRTR aims, among other things, at informing the public about important pollutant emissions due, in particular, to activities covered by Directive 96/61/EC. Consequently, under this Regulation, information should be provided to the public on emissions from installations covered by Annex I of that Directive.

(21) To reduce duplicate reporting, pollutant release and transfer register systems may, under the Protocol, be integrated to the degree practicable with existing information sources such as reporting mechanisms under licences or operating permits. In accordance with the Protocol, the provisions of this Regulation should not affect the right of the Member States to maintain or introduce a more extensive or more publicly accessible pollutant release and transfer register than required under the Protocol,

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[1] OJ L 184, 17.7.1999, p. 23.

[2] OJ L 377, 31.12.1991, p. 20. Directive as amended by Directive 94/31/EC (OJ L 168, 2.7.1994, p. 28).

[3] OJ L 257, 10.10.1996, p. 26. Directive as last amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

HAVE ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation establishes an integrated pollutant release and transfer register at Community level (hereinafter 'the European PRTR') in the form of a publicly accessible electronic database and lays down rules for its functioning, in order to implement the UNECE Protocol on Pollutant Release and Transfer Registers (hereinafter 'the Protocol') and facilitate public participation in environmental decision-making, as well as contributing to the prevention and reduction of pollution of the environment.

Article 2

Definitions

For the purposes of this Regulation the following definitions shall apply:

(1) 'the public' means one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organisations or groups;

(2) 'competent authority' means the national authority or authorities, or any other competent body or bodies, designated by the Member States;

(3) 'installation' means a stationary technical unit where one or more activities listed in Annex I are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;

(4) 'facility' means one or more installations on the same site that are operated by the same natural or legal person;

(5) 'site' means the geographical location of the facility;

(6) 'operator' means any natural or legal person who operates or controls the facility or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the facility has been delegated;

(7) 'reporting year' means the calendar year for which data on releases of pollutants and off-site transfers must be gathered;

(8) 'substance' means any chemical element and its compounds, with the exception of radioactive substances;

(9) 'pollutant' means a substance or a group of substances that may be harmful to the environment or to human health on account of its properties and of its introduction into the environment;

(10) 'release' means any introduction of pollutants into the environment as a result of any human activity, whether deliberate or accidental, routine or non-routine, including spilling, emitting, discharging, injecting, disposing or dumping, or through sewer systems without final waste-water treatment;

(11) 'off-site transfer' means the movement beyond the boundaries of a facility of waste destined for recovery or disposal and of pollutants in waste water destined for waste-water treatment;

(12) 'diffuse sources' means the many smaller or scattered sources from which pollutants may be released to land, air or water, whose combined impact on those media may be significant and for which it is impractical to collect reports from each individual source;

(13) 'waste' means any substance or object as defined in Article 1(a) of Council Directive 75/442/EEC of 15 July 1975 on waste [1];

(14) 'hazardous waste' means any substance or object as defined in Article 1(4) of Directive 91/689/EEC;

(15) 'waste water' means urban, domestic and industrial waste water, as defined in Article 2(1), (2) and (3) of Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment [2], and any other used water which is subject, because of the substances or objects it contains, to regulation by Community law;

(16) 'disposal' means any of the operations provided for in Annex IIA to Directive 75/442/EEC;

(17) 'recovery' means any of the operations provided for in Annex IIB to Directive 75/442/EEC.

Article 3

Content of the European PRTR

The European PRTR shall include information on:

(a) releases of pollutants referred to in Article 5(1)(a) that must be reported by the operators of the facilities carrying out the activities listed in Annex I;

[1] OJ L 194, 25.7.1975, p. 39. Directive as last amended by Regulation (EC) No 1882/2003.

[2] OJ L 135, 30.5.1991, p. 40. Directive as last amended by Regulation (EC) No 1882/2003.

(b) off-site transfers of waste referred to in Article 5(1)(b) and of pollutants in waste water referred to in Article 5(1)(c), that must be reported by the operators of the facilities carrying out the activities listed in Annex I;

(c) releases of pollutants from diffuse sources referred to in Article 8(1), where available.

Article 4

Design and structure

1. The Commission shall publish the European PRTR, presenting the data in both aggregated and non-aggregated forms, so that releases and transfers can be searched for and identified by:

(a) facility, including the facility's parent company where applicable, and its geographical location, including the river basin;

(b) activity;

(c) occurrence at Member State or Community level;

(d) pollutant or waste, as appropriate;

(e) each environmental medium (air, water, land) into which the pollutant is released;

(f) off-site transfers of waste and their destination, as appropriate;

(g) off-site transfers of pollutants in waste water;

(h) diffuse sources;

(i) facility owner or operator.

2. The European PRTR shall be designed for maximum ease of public access to allow the information, under normal operating conditions, to be continuously and readily accessible on the Internet and by other electronic means. Its design shall take into account the possibility of its future expansion and shall include all data reported for previous reporting years, up to at least the last ten previous reporting years.

3. The European PRTR shall include links to the following:

(a) the national PRTRs of Member States;

(b) other relevant existing, publicly accessible databases on subject matters related to PRTRs, including national PRTRs of other Parties to the Protocol and, where feasible, those of other countries;

(c) facilities' websites if they exist and links are volunteered by the facilities.

Article 5

Reporting by operators

1. The operator of each facility that undertakes one or more of the activities specified in Annex I above the applicable capacity thresholds specified therein shall report the amounts annually to its competent authority, along with an indication of whether the information is based on measurement, calculation or estimation, of the following:

(a) releases to air, water and land of any pollutant specified in Annex II for which the applicable threshold value specified in Annex II is exceeded;

(b) off-site transfers of hazardous waste exceeding 2 tonnes per year or of non hazardous waste exceeding 2 000 tonnes per year, for any operations of recovery or disposal with the exception of the disposal operations of land treatment and deep injection referred to in Article 6, indicating with 'R' or 'D' respectively whether the waste is destined for recovery or disposal and, for transboundary movements of hazardous waste, the name and address of the recoverer or the disposer of the waste and the actual recovery or disposal site;

(c) off-site transfers of any pollutant specified in Annex II in waste water destined for waste-water treatment for which the threshold value specified in Annex II, column 1b is exceeded.

The operator of each facility that undertakes one or more of the activities specified in Annex I above the applicable capacity thresholds specified therein shall communicate to its competent authority the information identifying the facility in accordance with Annex III unless that information is already available to the competent authority.

In the case of data indicated as being based on measurement or calculation the analytical method and/or the method of calculation shall be reported.

The releases referred to in Annex II reported under point (a) of this paragraph shall include all releases from all sources included in Annex I at the site of the facility.

2. The information referred to in paragraph 1 shall include information on releases and transfers resulting as totals of all deliberate, accidental, routine and non-routine activities.

In providing this information operators shall specify, where available, any data that relate to accidental releases.

3. The operator of each facility shall collect with appropriate frequency the information needed to determine which of the facility's releases and off-site transfers are subject to reporting requirements under paragraph 1.

4. When preparing the report, the operator concerned shall use the best available information, which may include monitoring data, emission factors, mass balance equations, indirect monitoring or other calculations, engineering judgements and other methods in line with Article 9(1) and in accordance with internationally approved methodologies, where these are available.

5. The operator of each facility concerned shall keep available for the competent authorities of the Member State the records of the data from which the reported information was derived for a period of five years, starting from the end of the reporting year concerned. These records shall also describe the methodology used for data gathering.

Article 6

Releases to land

Waste which is subject to 'land treatment' or 'deep injection' disposal operations, as specified in Annex IIA to Directive 75/442/EEC, shall be reported as a release to land only by the operator of the facility originating the waste.

Article 7

Reporting by Member States

1. The Member States shall determine, having regard to the requirements set out in paragraphs 2 and 3 of this Article, a date by which operators shall provide all the data referred to in Article 5(1) and (2) and the information referred to in Article 5(3), (4) and (5) to its competent authority.

2. Member States shall provide all the data referred to in Article 5(1) and (2) to the Commission by electronic transfer in the format set out in Annex III and within the following time-limits:

(a) for the first reporting year, within 18 months after the end of the reporting year;

(b) for all reporting years thereafter, within 15 months after the end of the reporting year.

The first reporting year shall be the year 2007.

3. The Commission, assisted by the European Environment Agency, shall incorporate the information reported by the Member States into the European PRTR within the following time-limits:

(a) for the first reporting year, within 21 months after the end of the reporting year;

(b) for all reporting years thereafter, within 16 months after the end of the reporting year.

Article 8

Releases from diffuse sources

1. The Commission, assisted by the European Environment Agency, shall include in the European PRTR information on releases from diffuse sources where such information exists and has already been reported by the Member States.

2. The information referred to in paragraph 1 shall be organised such as to allow users to search for and identify releases of pollutants from diffuse sources according to an adequate geographical disaggregation and shall include information on the type of methodology used to derive the information.

3. Where the Commission determines that no data on the releases from diffuse sources exist, it shall take measures to initiate reporting on releases of relevant pollutants from one or more diffuse sources in accordance with the procedure referred to in Article 19(2), using internationally approved methodologies where appropriate.

Article 9

Quality assurance and assessment

1. The operator of each facility subject to the reporting requirements set out in Article 5 shall assure the quality of the information that they report.

2. The competent authorities shall assess the quality of the data provided by the operators of the facilities referred to in paragraph 1, in particular as to their completeness, consistency and credibility.

3. The Commission shall coordinate work on quality assurance and quality assessment in consultation with the Committee referred to in Article 19(1).

4. The Commission may adopt guidelines for the monitoring and reporting of emissions in accordance with the procedure referred to in Article 19(2). These guidelines shall be in accordance with internationally approved methodologies, where appropriate, and shall be consistent with other Community legislation.

Article 10

Access to information

1. The Commission, assisted by the European Environment Agency, shall make the European PRTR publicly accessible by dissemination free of charge on the Internet in accordance with the timeframe set out in Article 7(3).

2. Where the information contained in the European PRTR is not easily accessible to the public by direct electronic means, the Member State concerned and the Commission shall facilitate electronic access to the European PRTR in publicly accessible locations.

Article 11

Confidentiality

Whenever information is kept confidential by a Member State in accordance with Article 4 of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information [1], the Member State shall, in its report under Article 7(2) of this Regulation for the reporting year concerned, indicate separately for each facility claiming confidentiality the type of information that has been withheld and the reason for which it has been withheld.

Article 12

Public participation

1. The Commission shall provide the public with early and effective opportunities to participate in the further development of the European PRTR, including capacity-building and the preparation of amendments to this Regulation.

2. The public shall have the opportunity to submit any relevant comments, information, analyses or opinions within a reasonable timeframe.

3. The Commission shall take due account of such input and shall inform the public about the outcome of the public participation.

Article 13

Access to justice

Access to justice in matters relating to public access to environmental information shall be ensured in accordance with Article 6 of Directive 2003/4/EC and, where the institutions of the Community are involved, in accordance with Articles 6, 7 and 8 of Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents [2].

Article 14

Guidance document

1. The Commission shall draw up a guidance document supporting the implementation of the European PRTR as soon as possible but no later than four months before the beginning of the first reporting year and in consultation with the Committee referred to in Article 19(1).

2. The guidance document for implementation of the European PRTR shall address in particular details on the following:

(a) reporting procedures;

(b) the data to be reported;

(c) quality assurance and assessment;

(d) indication of type of withheld data and reasons why they were withheld in the case of confidential data;

(e) reference to internationally approved release determination and analytical methods, sampling methodologies;

(f) indication of parent companies;

(g) coding of activities according to Annex I to this Regulation and to Directive 96/61/EC.

Article 15

Awareness raising

The Commission and the Member States shall promote awareness of the public of the European PRTR and shall ensure that assistance is provided in accessing the European PRTR and in understanding and using the information contained in it.

Article 16

Additional information to be reported by the Member States

1. Member States shall, in a single report based on the information from the last three reporting years to be delivered every three years together with the data provided in accordance with Article 7, inform the Commission on practice and measures taken regarding the following:

(a) requirements according to Article 5;

(b) quality assurance and assessment according to Article 9;

(c) access to information according to Article 10(2);

(d) awareness raising activities according to Article 15;

(e) confidentiality of information according to Article 11;

(f) penalties provided for according to Article 20 and experience with their application.

[1] OJ L 41, 14.2.2003, p. 26.
[2] OJ L 145, 31.5.2001, p. 43.

2. To facilitate the reporting by Member States referred to in paragraph 1 the Commission shall submit a proposal for a questionnaire, which shall be adopted in accordance with the procedure referred to in Article 19(2).

Article 17

Review by the Commission

1. The Commission shall review the information provided by Member States according to Article 7 and after consultation with the Member States shall publish a report every three years based on the information from the last three reporting years available, six months after the presentation of this information on the Internet.

2. This report shall be submitted to the European Parliament and the Council, together with an assessment of the operation of the European PRTR.

Article 18

Amendments to the Annexes

Any amendment necessary for adapting:

(a) Annexes II or III to this Regulation to scientific or technical progress,

or

(b) Annexes II and III to this Regulation as a result of the adoption by the Meeting of the Parties to the Protocol of any amendment to the Annexes to the Protocol,

shall be adopted in accordance with the procedure referred to in Article 19(2).

Article 19

Committee Procedure

1. The Commission shall be assisted by a committee.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period provided for in Article 5(6) of Decision 1999/468/EC shall be set at three months.

Article 20

Penalties

1. Member States shall lay down the rules on penalties applicable to infringements of the provisions of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.

2. The Member States shall notify those provisions to the Commission one year after entry into force of this Regulation at the latest and shall notify it without delay of any subsequent amendment affecting them.

Article 21

Amendments to Directives 91/689/EEC and 96/61/EC

1. Article 8(3) of Directive 91/689/EEC shall be deleted.

2. Article 15(3) of Directive 96/61/EC shall be deleted.

Article 22

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg, 18 January 2006.

For the European Parliament
The President
J. BORRELL FONTELLES

For the Council
The President
H. WINKLER

ANNEX I

Activities

No	Activity	Capacity threshold
1.	Energy sector	
(a)	Mineral oil and gas refineries	* (1)
(b)	Installations for gasification and liquefaction	*
(c)	Thermal power stations and other combustion installations	With a heat input of 50 megawatts (MW)
(d)	Coke ovens	*
(e)	Coal rolling mills	With a capacity of 1 tonne per hour
(f)	Installations for the manufacture of coal products and solid smokeless fuel	*
2.	Production and processing of metals	
(a)	Metal ore (including sulphide ore) roasting or sintering installations	*
(b)	Installations for the production of pig iron or steel (primary or secondary melting) including continuous casting	With a capacity of 2,5 tonnes per hour
(c)	Installations for the processing of ferrous metals:	
	(i) Hot-rolling mills	With a capacity of 20 tonnes of crude steel per hour
	(ii) Smitheries with hammers	With an energy of 50 kilojoules per hammer, where the calorific power used exceeds 20 MW
	(iii) Application of protective fused metal coats	With an input of 2 tonnes of crude steel per hour
(d)	Ferrous metal foundries	With a production capacity of 20 tonnes per day
(e)	Installations:	
	(i) For the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes	*
	(ii) For the smelting, including the alloying, of non-ferrous metals, including recovered products (refining, foundry casting, etc.)	With a melting capacity of 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals
(f)	Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process	Where the volume of the treatment vats equals 30 m^3
3.	Mineral industry	
(a)	Underground mining and related operations	*
(b)	Opencast mining and quarrying	Where the surface of the area effectively under extractive operation equals 25 hectares
(c)	Installations for the production of:	
	(i) Cement clinker in rotary kilns	With a production capacity of 500 tonnes per day
	(ii) Lime in rotary kilns	With a production capacity of 50 tonnes per day
	(iii) Cement clinker or lime in other furnaces	With a production capacity of 50 tonnes per day
(d)	Installations for the production of asbestos and the manufacture of asbestos-based products	*

No	Activity	Capacity threshold
(e)	Installations for the manufacture of glass, including glass fibre	With a melting capacity of 20 tonnes per day
(f)	Installations for melting mineral substances, including the production of mineral fibres	With a melting capacity of 20 tonnes per day
(g)	Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain	With a production capacity of 75 tonnes per day, or with a kiln capacity of 4 m^3 and with a setting density per kiln of 300 kg/m^3
4.	Chemical industry	
(a)	Chemical installations for the production on an industrial scale of basic organic chemicals, such as: (i) Simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic) (ii) Oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins (iii) Sulphurous hydrocarbons (iv) Nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates (v) Phosphorus-containing hydrocarbons (vi) Halogenic hydrocarbons (vii) Organometallic compounds (viii) Basic plastic materials (polymers, synthetic fibres and cellulose-based fibres) (ix) Synthetic rubbers (x) Dyes and pigments (xi) Surface-active agents and surfactants	*
(b)	Chemical installations for the production on an industrial scale of basic inorganic chemicals, such as: (i) Gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride (ii) Acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids (iii) Bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide (iv) Salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate (v) Non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide	*

No	Activity	Capacity threshold
(c)	Chemical installations for the production on an industrial scale of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)	*
(d)	Chemical installations for the production on an industrial scale of basic plant health products and of biocides	*
(e)	Installations using a chemical or biological process for the production on an industrial scale of basic pharmaceutical products	*
(f)	Installations for the production on an industrial scale of explosives and pyrotechnic products	*
5.	Waste and wastewater management	
(a)	Installations for the recovery or disposal of hazardous waste	Receiving 10 tonnes per day
(b)	Installations for the incineration of non-hazardous waste in the scope of Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste (2)	With a capacity of 3 tonnes per hour
(c)	Installations for the disposal of non-hazardous waste	With a capacity of 50 tonnes per day
(d)	Landfills (excluding landfills of inert waste and landfills, which were definitely closed before 16.7.2001 or for which the after-care phase required by the competent authorities according to Article 13 of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (3) has expired)	Receiving 10 tonnes per day or with a total capacity of 25 000 tonnes
(e)	Installations for the disposal or recycling of animal carcasses and animal waste	With a treatment capacity of 10 tonnes per day
(f)	Urban waste-water treatment plants	With a capacity of 100 000 population equivalents
(g)	Independently operated industrial waste-water treatment plants which serve one or more activities of this annex	With a capacity of 10 000 m^3 per day (4)
6.	Paper and wood production and processing	
(a)	Industrial plants for the production of pulp from timber or similar fibrous materials	*
(b)	Industrial plants for the production of paper and board and other primary wood products (such as chipboard, fibreboard and plywood)	With a production capacity of 20 tonnes per day
(c)	Industrial plants for the preservation of wood and wood products with chemicals	With a production capacity of 50 m^3 per day
7.	Intensive livestock production and aquaculture	
(a)	Installations for the intensive rearing of poultry or pigs	(i) With 40 000 places for poultry (ii) With 2 000 places for production pigs (over 30 kg) (iii) With 750 places for sows
(b)	Intensive aquaculture	With a production capacity of 1 000 tonnes of fish or shellfish per year

No	Activity	Capacity threshold
8.	Animal and vegetable products from the food and beverage sector	
(a)	Slaughterhouses	With a carcass production capacity of 50 tonnes per day
(b)	Treatment and processing intended for the production of food and beverage products from:	
	(i) Animal raw materials (other than milk)	With a finished product production capacity of 75 tonnes per day
	(ii) Vegetable raw materials	With a finished product production capacity of 300 tonnes per day (average value on a quarterly basis)
(c)	Treatment and processing of milk	With a capacity to receive 200 tonnes of milk per day (average value on an annual basis)
9.	Other activities	
(a)	Plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres or textiles	With a treatment capacity of 10 tonnes per day
(b)	Plants for the tanning of hides and skins	With a treatment capacity of 12 tonnes of finished product per day
(c)	Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating	With a consumption capacity of 150 kg per hour or 200 tonnes per year
(d)	Installations for the production of carbon (hard-burnt coal) or electro-graphite by means of incineration or graphitisation	*
(e)	Installations for the building of, and painting or removal of paint from ships	With a capacity for ships 100 m long

(1) An asterisk (*) indicates that no capacity threshold is applicable (all facilities are subject to reporting).
(2) OJ L 332, 28.12.2000, p. 91.
(3) OJ L 182, 16.7.1999, p. 1. Directive as amended by Regulation (EC) No 1882/2003.
(4) The capacity threshold shall be reviewed by 2010 at the latest in the light of the results of the first reporting cycle.

ANNEX II

Pollutants (*)

No	CAS number	Pollutant (1)	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
1	74-82-8	Methane (CH_4)	100 000	— (2)	—
2	630-08-0	Carbon monoxide (CO)	500 000	—	—
3	124-38-9	Carbon dioxide (CO_2)	100 million	—	—
4		Hydro-fluorocarbons (HFCs) (3)	100	—	—
5	10024-97-2	Nitrous oxide (N_2O)	10 000	—	—
6	7664-41-7	Ammonia (NH_3)	10 000	—	—
7		Non-methane volatile organic compounds (NMVOC)	100 000	—	—
8		Nitrogen oxides (NO_x/NO_2)	100 000	—	—
9		Perfluorocarbons (PFCs) (4)	100	—	—
10	2551-62-4	Sulphur hexafluoride (SF_6)	50	—	—
11		Sulphur oxides (SO_x/SO_2)	150 000	—	—
12		Total nitrogen	—	50 000	50 000
13		Total phosphorus	—	5 000	5 000
14		Hydrochlorofluorocarbons (HCFCs) (5)	1	—	—
15		Chlorofluorocarbons (CFCs) (6)	1	—	—
16		Halons (7)	1	—	—
17		Arsenic and compounds (as As) (8)	20	5	5
18		Cadmium and compounds (as Cd) (8)	10	5	5
19		Chromium and compounds (as Cr) (8)	100	50	50
20		Copper and compounds (as Cu) (8)	100	50	50
21		Mercury and compounds (as Hg) (8)	10	1	1
22		Nickel and compounds (as Ni) (8)	50	20	20
23		Lead and compounds (as Pb) (8)	200	20	20
24		Zinc and compounds (as Zn) (8)	200	100	100
25	15972-60-8	Alachlor	—	1	1
26	309-00-2	Aldrin	1	1	1
27	1912-24-9	Atrazine	—	1	1
28	57-74-9	Chlordane	1	1	1

(*) Releases of pollutants falling into several categories of pollutants shall be reported for each of these categories.

No	CAS number	Pollutant [1]	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
29	143-50-0	Chlordecone	1	1	1
30	470-90-6	Chlorfenvinphos	—	1	1
31	85535-84-8	Chloro-alkanes, C_{10}-C_{13}	—	1	1
32	2921-88-2	Chlorpyrifos	—	1	1
33	50-29-3	DDT	1	1	1
34	107-06-2	1,2-dichloroethane (EDC)	1 000	10	10
35	75-09-2	Dichloromethane (DCM)	1 000	10	10
36	60-57-1	Dieldrin	1	1	1
37	330-54-1	Diuron	—	1	1
38	115-29-7	Endosulphan	—	1	1
39	72-20-8	Endrin	1	1	1
40		Halogenated organic compounds (as AOX) [9]	—	1 000	1 000
41	76-44-8	Heptachlor	1	1	1
42	118-74-1	Hexachlorobenzene (HCB)	10	1	1
43	87-68-3	Hexachlorobutadiene (HCBD)	—	1	1
44	608-73-1	1,2,3,4,5,6-hexachlorocyclohexane(HCH)	10	1	1
45	58-89-9	Lindane	1	1	1
46	2385-85-5	Mirex	1	1	1
47		PCDD + PCDF (dioxins + furans) (as Teq) [10]	0,0001	0,0001	0,0001
48	608-93-5	Pentachlorobenzene	1	1	1
49	87-86-5	Pentachlorophenol (PCP)	10	1	1
50	1336-36-3	Polychlorinated biphenyls (PCBs)	0,1	0,1	0,1
51	122-34-9	Simazine	—	1	1
52	127-18-4	Tetrachloroethylene (PER)	2 000	10	—
53	56-23-5	Tetrachloromethane (TCM)	100	1	—
54	12002-48-1	Trichlorobenzenes (TCBs) (all isomers)	10	1	—
55	71-55-6	1,1,1-trichloroethane	100	—	—
56	79-34-5	1,1,2,2-tetrachloroethane	50	—	—
57	79-01-6	Trichloroethylene	2 000	10	—
58	67-66-3	Trichloromethane	500	10	—
59	8001-35-2	Toxaphene	1	1	1
60	75-01-4	Vinyl chloride	1 000	10	10
61	120-12-7	Anthracene	50	1	1

No	CAS number	Pollutant [1]	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
62	71-43-2	Benzene	1 000	200 (as BTEX) [11]	200 (as BTEX) [11]
63		Brominated diphenylethers (PBDE) [12]	—	1	1
64		Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	—	1	1
65	100-41-4	Ethyl benzene	—	200 (as BTEX) [11]	200 (as BTEX) [11]
66	75-21-8	Ethylene oxide	1 000	10	10
67	34123-59-6	Isoproturon	—	1	1
68	91-20-3	Naphthalene	100	10	10
69		Organotin compounds(as total Sn)	—	50	50
70	117-81-7	Di-(2-ethyl hexyl) phthalate (DEHP)	10	1	1
71	108-95-2	Phenols (as total C) [13]	—	20	20
72		Polycyclic aromatic hydrocarbons (PAHs) [14]	50	5	5
73	108-88-3	Toluene	—	200 (as BTEX) [11]	200 (as BTEX) [11]
74		Tributyltin and compounds [15]	—	1	1
75		Triphenyltin and compounds [16]	—	1	1
76		Total organic carbon (TOC) (as total C or COD/3)	—	50 000	—
77	1582-09-8	Trifluralin	—	1	1
78	1330-20-7	Xylenes [17]	—	200 (as BTEX) [11]	200 (as BTEX) [11]
79		Chlorides (as total Cl)	—	2 million	2 million
80		Chlorine and inorganic compounds (as HCl)	10 000	—	—
81	1332-21-4	Asbestos	1	1	1
82		Cyanides (as total CN)	—	50	50
83		Fluorides (as total F)	—	2 000	2 000
84		Fluorine and inorganic compounds (as HF)	5 000	—	—
85	74-90-8	Hydrogen cyanide (HCN)	200	—	—
86		Particulate matter (PM_{10})	50 000	—	—
87	1806-26-4	Octylphenols and Octylphenol ethoxylates	—	1	—

No	CAS number	Pollutant (1)	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
88	206-44-0	Fluoranthene	—	1	—
89	465-73-6	Isodrin	—	1	—
90	36355-1-8	Hexabromobiphenyl	0,1	0,1	0,1
91	191-24-2	Benzo(g,h,i)perylene		1	

(1) Unless otherwise specified any pollutant specified in Annex II shall be reported as the total mass of that pollutant or, where the pollutant is a group of substances, as the total mass of the group.

(2) A hyphen (—) indicates that the parameter and medium in question do not trigger a reporting requirement.

(3) Total mass of hydrogen fluorocarbons: sum of HFC23, HFC32, HFC41, HFC4310mee, HFC125, HFC134, HFC134a, HFC152a, HFC143, HFC143a, HFC227ea, HFC236fa, HFC245ca, HFC365mfc.

(4) Total mass of perfluorocarbons: sum of CF_4, C_2F_6, C_3F_8, C_4F_{10}, c-C_4F_8, C_5F_{12}, C_6F_{14}.

(5) Total mass of substances including their isomers listed in Group VIII of Annex I to Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (OJ L 244, 29.9.2000, p. 1). Regulation as amended by Regulation (EC) No 1804/2003 (OJ L 265, 16.10.2003, p. 1).

(6) Total mass of substances including their isomers listed in Group I and II of Annex I to Regulation (EC) No 2037/2000.

(7) Total mass of substances including their isomers listed in Group III and VI of Annex I to Regulation (EC) No 2037/2000.

(8) All metals shall be reported as the total mass of the element in all chemical forms present in the release.

(9) Halogenated organic compounds which can be adsorbed to activated carbon expressed as chloride.

(10) Expressed as I-TEQ.

(11) Single pollutants are to be reported if the threshold for BTEX (the sum parameter of benzene, toluene, ethyl benzene, xylenes) is exceeded.

(12) Total mass of the following brominated diphenylethers: penta-BDE, octa-BDE and deca-BDE.

(13) Total mass of phenol and simple substituted phenols expressed as total carbon.

(14) Polycyclic aromatic hydrocarbons (PAHs) are to be measured for reporting of releases to air as benzo(a)pyrene (50-32-8), benzo(b)fluoranthene (205-99-2), benzo(k)fluoranthene (207-08-9), indeno(1,2,3-cd)pyrene (193-39-5) (derived from Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants (OJ L 229, 29.6.2004, p. 5)).

(15) Total mass of tributyltin compounds, expressed as mass of tributyltin.

(16) Total mass of triphenyltin compounds, expressed as mass of triphenyltin.

(17) Total mass of xylene (ortho-xylene, meta-xylene, para-xylene).

ANNEX III

Format for the reporting of release and transfer data by Member States to the Commission

Reference year		
Identification of the facility		
Name of the parent company Name of the facility Identification number of facility Street address Town/village Postal code Country Coordinates of the location River basin district (1) NACE-code (4 digits) Main economic activity Production volume (optional) Number of installations (optional) Number of operating hours in year (optional) Number of employees (optional) Text field for textual information or website address delivered by facility or parent company (optional)		
All Annex I activities of the facility (according to the coding system given in Annex I and the IPPC code where available)		
Activity 1 (main Annex I activity) Activity 2 Activity N		
Release data to air for the facility for each pollutant exceeding threshold value (according to Annex II)		Releases to air
Pollutant 1 Pollutant 2 Pollutant N	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	T: Total in kg/year A: accidental in kg/year
Release data to water for the facility for each pollutant exceeding threshold value (according to Annex II)		Releases to water
Pollutant 1 Pollutant 2 Pollutant N	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	T: Total in kg/year A: accidental in kg/year
Release data to land for the facility for each pollutant exceeding threshold value (according to Annex II)		Releases to land
Pollutant 1 Pollutant 2 Pollutant N	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	T: Total in kg/year A: accidental in kg/year

Off-site transfer of each pollutant destined for waste-water treatment in quantities exceeding threshold value (according to Annex II)		
Pollutant 1 Pollutant 2 Pollutant N	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in kg/year
Off-site transfers of hazardous waste for the facility exceeding threshold value (according to Article 5)		
Within the country: For Recovery (R)	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in tonnes/year
Within the country: For Disposal (D)	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in tonnes/year
To other countries: For Recovery (R) Name of the recoverer Address of the recoverer Address of actual recovery site receiving the transfer	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in tonnes/year
To other countries: For Disposal (D) Name of the disposer Address of the disposer Address of actual disposal site receiving the transfer	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in tonnes/year
Off-site transfer of non-hazardous waste for the facility exceeding threshold value (according to Article 5)		
For Recovery (R)	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in tonnes/year
For Disposal (D)	M: measured; Analytical Method used C: calculated; Calculation Method used E: estimated	in tonnes/year
Competent authority for requests of the public: Name Street address Town/village Telephone No Fax No E-mail address		

(1) According to Article 3(1) of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1). Directive as amended by Decision No 2455/2001/EC (OJ L 331, 15.12.2001, p. 1).

I

(Legislative acts)

DIRECTIVES

DIRECTIVE 2011/92/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 13 December 2011

on the assessment of the effects of certain public and private projects on the environment

(codification)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee [1],

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure [2],

Whereas:

(1) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment [3] has been substantially amended several times [4]. In the interests of clarity and rationality the said Directive should be codified.

(2) Pursuant to Article 191 of the Treaty on the Functioning of the European Union, Union policy on the environment is based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should, as a priority, be rectified at source and that the polluter should pay. Effects on the environment should be taken into account at the earliest possible stage in all the technical planning and decision-making processes.

(3) The principles of the assessment of environmental effects should be harmonised, in particular with reference to the projects which should be subject to assessment, the main obligations of the developers and the content of the assessment. The Member States may lay down stricter rules to protect the environment.

(4) In addition, it is necessary to achieve one of the objectives of the Union in the sphere of the protection of the environment and the quality of life.

(5) The environmental legislation of the Union includes provisions enabling public authorities and other bodies to take decisions which may have a significant effect on the environment as well as on personal health and well-being.

(6) General principles for the assessment of environmental effects should be laid down with a view to supplementing and coordinating development consent procedures governing public and private projects likely to have a major effect on the environment.

(7) Development consent for public and private projects which are likely to have significant effects on the environment should be granted only after an assessment of the likely significant environmental effects of those projects has been carried out. That assessment should be conducted on the basis of the appropriate information supplied by the developer, which may be supplemented by the authorities and by the public likely to be concerned by the project in question.

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[1] OJ C 248, 25.8.2011, p. 154.

[2] Position of the European Parliament of 13 September 2011 (not yet published in the Official Journal) and decision of the Council of 15 November 2011.

[3] OJ L 175, 5.7.1985, p. 40.

[4] See Annex VI, Part A.

(8) Projects belonging to certain types have significant effects on the environment and those projects should, as a rule, be subject to a systematic assessment.

(9) Projects of other types may not have significant effects on the environment in every case and those projects should be assessed where the Member States consider that they are likely to have significant effects on the environment.

(10) Member States may set thresholds or criteria for the purpose of determining which of such projects should be subject to assessment on the basis of the significance of their environmental effects. Member States should not be required to examine projects below those thresholds or outside those criteria on a case-by-case basis.

(11) When setting such thresholds or criteria or examining projects on a case-by-case basis, for the purpose of determining which projects should be subject to assessment on the basis of their significant environmental effects, Member States should take account of the relevant selection criteria set out in this Directive. In accordance with the subsidiarity principle, the Member States are in the best position to apply those criteria in specific instances.

(12) For projects which are subject to assessment, a certain minimal amount of information should be supplied, concerning the project and its effects.

(13) It is appropriate to lay down a procedure in order to enable the developer to obtain an opinion from the competent authorities on the content and extent of the information to be elaborated and supplied for the assessment. Member States, in the framework of this procedure, may require the developer to provide, inter alia, alternatives for the projects for which it intends to submit an application.

(14) The effects of a project on the environment should be assessed in order to take account of concerns to protect human health, to contribute by means of a better environment to the quality of life, to ensure maintenance of the diversity of species and to maintain the reproductive capacity of the ecosystem as a basic resource for life.

(15) It is desirable to lay down strengthened provisions concerning environmental impact assessment in a transboundary context to take account of developments at international level. The European Community signed the Convention on Environmental Impact Assessment in a Transboundary Context on 25 February 1991, and ratified it on 24 June 1997.

(16) Effective public participation in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken.

(17) Participation, including participation by associations, organisations and groups, in particular non-governmental organisations promoting environmental protection, should accordingly be fostered, including, inter alia, by promoting environmental education of the public.

(18) The European Community signed the UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Aarhus Convention) on 25 June 1998 and ratified it on 17 February 2005.

(19) Among the objectives of the Aarhus Convention is the desire to guarantee rights of public participation in decision-making in environmental matters in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.

(20) Article 6 of the Aarhus Convention provides for public participation in decisions on the specific activities listed in Annex I thereto and on activities not so listed which may have a significant effect on the environment.

(21) Article 9(2) and (4) of the Aarhus Convention provides for access to judicial or other procedures for challenging the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of Article 6 of that Convention.

(22) However, this Directive should not be applied to projects the details of which are adopted by a specific act of national legislation, since the objectives of this Directive, including that of supplying information, are achieved through the legislative process.

(23) Furthermore, it may be appropriate in exceptional cases to exempt a specific project from the assessment procedures laid down by this Directive, subject to appropriate information being supplied to the Commission and to the public concerned.

(24) Since the objectives of this Directive cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(25) This Directive should be without prejudice to the obligations of the Member States relating to the time limits for transposition into national law of the Directives set out in Annex V, Part B,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive shall apply to the assessment of the environmental effects of those public and private projects which are likely to have significant effects on the environment.

2. For the purposes of this Directive, the following definitions shall apply:

(a) 'project' means:

— the execution of construction works or of other installations or schemes,

— other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources;

(b) 'developer' means the applicant for authorisation for a private project or the public authority which initiates a project;

(c) 'development consent' means the decision of the competent authority or authorities which entitles the developer to proceed with the project;

(d) 'public' means one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups;

(e) 'public concerned' means the public affected or likely to be affected by, or having an interest in, the environmental decision-making procedures referred to in Article 2(2). For the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest;

(f) 'competent authority or authorities' means that authority or those authorities which the Member States designate as responsible for performing the duties arising from this Directive.

3. Member States may decide, on a case-by-case basis if so provided under national law, not to apply this Directive to projects serving national defence purposes, if they deem that such application would have an adverse effect on those purposes.

4. This Directive shall not apply to projects the details of which are adopted by a specific act of national legislation, since the objectives of this Directive, including that of supplying information, are achieved through the legislative process.

Article 2

1. Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.

2. The environmental impact assessment may be integrated into the existing procedures for consent to projects in the Member States, or, failing this, into other procedures or into procedures to be established to comply with the aims of this Directive.

3. Member States may provide for a single procedure in order to fulfil the requirements of this Directive and the requirements of Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control [1].

4. Without prejudice to Article 7, Member States may, in exceptional cases, exempt a specific project in whole or in part from the provisions laid down in this Directive.

In that event, the Member States shall:

(a) consider whether another form of assessment would be appropriate;

(b) make available to the public concerned the information obtained under other forms of assessment referred to in point (a), the information relating to the decision granting exemption and the reasons for granting it;

(c) inform the Commission, prior to granting consent, of the reasons justifying the exemption granted, and provide it with the information made available, where applicable, to their own nationals.

The Commission shall immediately forward the documents received to the other Member States.

The Commission shall report annually to the European Parliament and to the Council on the application of this paragraph.

[1] OJ L 24, 29.1.2008, p. 8.

Article 3

The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors:

(a) human beings, fauna and flora;

(b) soil, water, air, climate and the landscape;

(c) material assets and the cultural heritage;

(d) the interaction between the factors referred to in points (a), (b) and (c).

Article 4

1. Subject to Article 2(4), projects listed in Annex I shall be made subject to an assessment in accordance with Articles 5 to 10.

2. Subject to Article 2(4), for projects listed in Annex II, Member States shall determine whether the project shall be made subject to an assessment in accordance with Articles 5 to 10. Member States shall make that determination through:

(a) a case-by-case examination;

or

(b) thresholds or criteria set by the Member State.

Member States may decide to apply both procedures referred to in points (a) and (b).

3. When a case-by-case examination is carried out or thresholds or criteria are set for the purpose of paragraph 2, the relevant selection criteria set out in Annex III shall be taken into account.

4. Member States shall ensure that the determination made by the competent authorities under paragraph 2 is made available to the public.

Article 5

1. In the case of projects which, pursuant to Article 4, are to be made subject to an environmental impact assessment in accordance with this Article and Articles 6 to 10, Member States shall adopt the necessary measures to ensure that the developer supplies in an appropriate form the information specified in Annex IV inasmuch as:

(a) the Member States consider that the information is relevant to a given stage of the consent procedure and to the specific characteristics of a particular project or type of project and of the environmental features likely to be affected;

(b) the Member States consider that a developer may reasonably be required to compile this information having regard, inter alia, to current knowledge and methods of assessment.

2. Member States shall take the necessary measures to ensure that, if the developer so requests before submitting an application for development consent, the competent authority shall give an opinion on the information to be supplied by the developer in accordance with paragraph 1. The competent authority shall consult the developer and authorities referred to in Article 6(1) before it gives its opinion. The fact that the authority has given an opinion under this paragraph shall not preclude it from subsequently requiring the developer to submit further information.

Member States may require the competent authorities to give such an opinion, irrespective of whether the developer so requests.

3. The information to be provided by the developer in accordance with paragraph 1 shall include at least:

(a) a description of the project comprising information on the site, design and size of the project;

(b) a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects;

(c) the data required to identify and assess the main effects which the project is likely to have on the environment;

(d) an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects;

(e) a non-technical summary of the information referred to in points (a) to (d).

4. Member States shall, if necessary, ensure that any authorities holding relevant information, with particular reference to Article 3, make this information available to the developer.

Article 6

1. Member States shall take the measures necessary to ensure that the authorities likely to be concerned by the project by reason of their specific environmental responsibilities are given an opportunity to express their opinion on the information supplied by the developer and on the request for development consent. To that end, Member States shall designate the authorities to be consulted, either in general terms or on a case-by-case basis. The information gathered pursuant to Article 5 shall be forwarded to those authorities. Detailed arrangements for consultation shall be laid down by the Member States.

2. The public shall be informed, whether by public notices or by other appropriate means such as electronic media where available, of the following matters early in the environmental decision-making procedures referred to in Article 2(2) and, at the latest, as soon as information can reasonably be provided:

(a) the request for development consent;

(b) the fact that the project is subject to an environmental impact assessment procedure and, where relevant, the fact that Article 7 applies;

(c) details of the competent authorities responsible for taking the decision, those from which relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;

(d) the nature of possible decisions or, where there is one, the draft decision;

(e) an indication of the availability of the information gathered pursuant to Article 5;

(f) an indication of the times and places at which, and the means by which, the relevant information will be made available;

(g) details of the arrangements for public participation made pursuant to paragraph 5 of this Article.

3. Member States shall ensure that, within reasonable time-frames, the following is made available to the public concerned:

(a) any information gathered pursuant to Article 5;

(b) in accordance with national legislation, the main reports and advice issued to the competent authority or authorities at the time when the public concerned is informed in accordance with paragraph 2 of this Article;

(c) in accordance with the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information [1], information other than that referred to in paragraph 2 of this Article which is relevant for the decision in accordance with Article 8 of this Directive and which only becomes available after the time the public concerned was informed in accordance with paragraph 2 of this Article.

4. The public concerned shall be given early and effective opportunities to participate in the environmental decision-making procedures referred to in Article 2(2) and shall, for that purpose, be entitled to express comments and opinions when all options are open to the competent authority or authorities before the decision on the request for development consent is taken.

5. The detailed arrangements for informing the public (for example by bill posting within a certain radius or publication in local newspapers) and for consulting the public concerned (for example by written submissions or by way of a public inquiry) shall be determined by the Member States.

6. Reasonable time-frames for the different phases shall be provided, allowing sufficient time for informing the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to the provisions of this Article.

Article 7

1. Where a Member State is aware that a project is likely to have significant effects on the environment in another Member State or where a Member State likely to be significantly affected so requests, the Member State in whose territory the project is intended to be carried out shall send to the affected Member State as soon as possible and no later than when informing its own public, inter alia:

(a) a description of the project, together with any available information on its possible transboundary impact;

(b) information on the nature of the decision which may be taken.

The Member State in whose territory the project is intended to be carried out shall give the other Member State a reasonable time in which to indicate whether it wishes to participate in the environmental decision-making procedures referred to in Article 2(2), and may include the information referred to in paragraph 2 of this Article.

2. If a Member State which receives information pursuant to paragraph 1 indicates that it intends to participate in the environmental decision-making procedures referred to in Article 2(2), the Member State in whose territory the project is intended to be carried out shall, if it has not already done so, send to the affected Member State the information required to be given pursuant to Article 6(2) and made available pursuant to points (a) and (b) of Article 6(3).

3. The Member States concerned, each insofar as it is concerned, shall also:

(a) arrange for the information referred to in paragraphs 1 and 2 to be made available, within a reasonable time, to the authorities referred to in Article 6(1) and the public concerned in the territory of the Member State likely to be significantly affected; and

[1] OJ L 41, 14.2.2003, p. 26.

(b) ensure that the authorities referred to in Article 6(1) and the public concerned are given an opportunity, before development consent for the project is granted, to forward their opinion within a reasonable time on the information supplied to the competent authority in the Member State in whose territory the project is intended to be carried out.

4. The Member States concerned shall enter into consultations regarding, inter alia, the potential transboundary effects of the project and the measures envisaged to reduce or eliminate such effects and shall agree on a reasonable timeframe for the duration of the consultation period.

5. The detailed arrangements for implementing this Article may be determined by the Member States concerned and shall be such as to enable the public concerned in the territory of the affected Member State to participate effectively in the environmental decision-making procedures referred to in Article 2(2) for the project.

Article 8

The results of consultations and the information gathered pursuant to Articles 5, 6 and 7 shall be taken into consideration in the development consent procedure.

Article 9

1. When a decision to grant or refuse development consent has been taken, the competent authority or authorities shall inform the public thereof in accordance with the appropriate procedures and shall make available to the public the following information:

(a) the content of the decision and any conditions attached thereto;

(b) having examined the concerns and opinions expressed by the public concerned, the main reasons and considerations on which the decision is based, including information about the public participation process;

(c) a description, where necessary, of the main measures to avoid, reduce and, if possible, offset the major adverse effects.

2. The competent authority or authorities shall inform any Member State which has been consulted pursuant to Article 7, forwarding to it the information referred to in paragraph 1 of this Article.

The consulted Member States shall ensure that that information is made available in an appropriate manner to the public concerned in their own territory.

Article 10

The provisions of this Directive shall not affect the obligation on the competent authorities to respect the limitations imposed by national laws, regulations and administrative provisions and accepted legal practices with regard to commercial and industrial confidentiality, including intellectual property, and the safeguarding of the public interest.

Where Article 7 applies, the transmission of information to another Member State and the receipt of information by another Member State shall be subject to the limitations in force in the Member State in which the project is proposed.

Article 11

1. Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned:

(a) having a sufficient interest, or alternatively;

(b) maintaining the impairment of a right, where administrative procedural law of a Member State requires this as a precondition;

have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of this Directive.

2. Member States shall determine at what stage the decisions, acts or omissions may be challenged.

3. What constitutes a sufficient interest and impairment of a right shall be determined by the Member States, consistently with the objective of giving the public concerned wide access to justice. To that end, the interest of any non-governmental organisation meeting the requirements referred to in Article 1(2) shall be deemed sufficient for the purpose of point (a) of paragraph 1 of this Article. Such organisations shall also be deemed to have rights capable of being impaired for the purpose of point (b) of paragraph 1 of this Article.

4. The provisions of this Article shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

Any such procedure shall be fair, equitable, timely and not prohibitively expensive.

5. In order to further the effectiveness of the provisions of this Article, Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures.

Article 12

1. The Member States and the Commission shall exchange information on the experience gained in applying this Directive.

2. In particular, Member States shall inform the Commission of any criteria and/or thresholds adopted for the selection of the projects in question, in accordance with Article 4(2).

3. On the basis of that exchange of information, the Commission shall if necessary submit additional proposals to the European Parliament and to the Council, with a view to ensuring that this Directive is applied in a sufficiently coordinated manner.

Article 13

Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field covered by this Directive.

Article 14

Directive 85/337/EEC, as amended by the Directives listed in Annex V, Part A, is repealed, without prejudice to the obligations of the Member States relating to the time limits for transposition into national law of the Directives set out in Annex V, Part B.

References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex VI.

Article 15

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

Article 16

This Directive is addressed to the Member States.

Done at Strasbourg, 13 December 2011.

For the European Parliament	*For the Council*
The President	*The President*
J. BUZEK	M. SZPUNAR

ANNEX I

PROJECTS REFERRED TO IN ARTICLE 4(1)

1. Crude-oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day.

2. (a) Thermal power stations and other combustion installations with a heat output of 300 megawatts or more;

   (b) Nuclear power stations and other nuclear reactors including the dismantling or decommissioning of such power stations or reactors [1] (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).

3. (a) Installations for the reprocessing of irradiated nuclear fuel;

   (b) Installations designed:

      (i) for the production or enrichment of nuclear fuel;

      (ii) for the processing of irradiated nuclear fuel or high-level radioactive waste;

      (iii) for the final disposal of irradiated nuclear fuel;

      (iv) solely for the final disposal of radioactive waste;

      (v) solely for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the production site.

4. (a) Integrated works for the initial smelting of cast iron and steel;

   (b) Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes.

5. Installations for the extraction of asbestos and for the processing and transformation of asbestos and products containing asbestos: for asbestos-cement products, with an annual production of more than 20 000 tonnes of finished products, for friction material, with an annual production of more than 50 tonnes of finished products, and for other uses of asbestos, utilisation of more than 200 tonnes per year.

6. Integrated chemical installations, i.e. those installations for the manufacture on an industrial scale of substances using chemical conversion processes, in which several units are juxtaposed and are functionally linked to one another and which are:

   (a) for the production of basic organic chemicals;

   (b) for the production of basic inorganic chemicals;

   (c) for the production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers);

   (d) for the production of basic plant health products and of biocides;

   (e) for the production of basic pharmaceutical products using a chemical or biological process;

   (f) for the production of explosives.

[1] Nuclear power stations and other nuclear reactors cease to be such an installation when all nuclear fuel and other radioactively contaminated elements have been removed permanently from the installation site.

7. (a) Construction of lines for long-distance railway traffic and of airports [1] with a basic runway length of 2 100 m or more;

   (b) Construction of motorways and express roads [2];

   (c) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road or realigned and/or widened section of road would be 10 km or more in a continuous length.

8. (a) Inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1 350 tonnes;

   (b) Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1 350 tonnes.

9. Waste disposal installations for the incineration, chemical treatment as defined in Annex I to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste [3] under heading D9, or landfill of hazardous waste, as defined in point 2 of Article 3 of that Directive.

10. Waste disposal installations for the incineration or chemical treatment as defined in Annex I to Directive 2008/98/EC under heading D9 of non-hazardous waste with a capacity exceeding 100 tonnes per day.

11. Groundwater abstraction or artificial groundwater recharge schemes where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres.

12. (a) Works for the transfer of water resources between river basins where that transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year;

    (b) In all other cases, works for the transfer of water resources between river basins where the multi-annual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5 % of that flow.

    In both cases transfers of piped drinking water are excluded.

13. Waste water treatment plants with a capacity exceeding 150 000 population equivalent as defined in point 6 of Article 2 of Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment [4].

14. Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes/day in the case of petroleum and 500 000 cubic metres/day in the case of gas.

15. Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres.

16. Pipelines with a diameter of more than 800 mm and a length of more than 40 km:

    (a) for the transport of gas, oil, chemicals;

    (b) for the transport of carbon dioxide (CO_2) streams for the purposes of geological storage, including associated booster stations.

17. Installations for the intensive rearing of poultry or pigs with more than:

    (a) 85 000 places for broilers, 60 000 places for hens;

    (b) 3 000 places for production pigs (over 30 kg); or

    (c) 900 places for sows.

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[1] For the purposes of this Directive, 'airport' means an airport which complies with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organisation (Annex 14).

[2] For the purposes of this Directive, 'express road' means a road which complies with the definition in the European Agreement on Main International Traffic Arteries of 15 November 1975.

[3] OJ L 312, 22.11.2008, p. 3.

[4] OJ L 135, 30.5.1991, p. 40.

18. Industrial plants for the production of:

    (a) pulp from timber or similar fibrous materials;

    (b) paper and board with a production capacity exceeding 200 tonnes per day.

19. Quarries and open-cast mining where the surface of the site exceeds 25 hectares, or peat extraction, where the surface of the site exceeds 150 hectares.

20. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.

21. Installations for storage of petroleum, petrochemical, or chemical products with a capacity of 200 000 tonnes or more.

22. Storage sites pursuant to Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide [1].

23. Installations for the capture of CO_2 streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations covered by this Annex, or where the total yearly capture of CO_2 is 1,5 megatonnes or more.

24. Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex.

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[1] OJ L 140, 5.6.2009, p. 114.

ANNEX II

PROJECTS REFERRED TO IN ARTICLE 4(2)

1. AGRICULTURE, SILVICULTURE AND AQUACULTURE

   (a) Projects for the restructuring of rural land holdings;

   (b) Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes;

   (c) Water management projects for agriculture, including irrigation and land drainage projects;

   (d) Initial afforestation and deforestation for the purposes of conversion to another type of land use;

   (e) Intensive livestock installations (projects not included in Annex I);

   (f) Intensive fish farming;

   (g) Reclamation of land from the sea.

2. EXTRACTIVE INDUSTRY

   (a) Quarries, open-cast mining and peat extraction (projects not included in Annex I);

   (b) Underground mining;

   (c) Extraction of minerals by marine or fluvial dredging;

   (d) Deep drillings, in particular:

      (i) geothermal drilling;

      (ii) drilling for the storage of nuclear waste material;

      (iii) drilling for water supplies;

      with the exception of drillings for investigating the stability of the soil;

   (e) Surface industrial installations for the extraction of coal, petroleum, natural gas and ores, as well as bituminous shale.

3. ENERGY INDUSTRY

   (a) Industrial installations for the production of electricity, steam and hot water (projects not included in Annex I);

   (b) Industrial installations for carrying gas, steam and hot water; transmission of electrical energy by overhead cables (projects not included in Annex I);

   (c) Surface storage of natural gas;

   (d) Underground storage of combustible gases;

   (e) Surface storage of fossil fuels;

   (f) Industrial briquetting of coal and lignite;

   (g) Installations for the processing and storage of radioactive waste (unless included in Annex I);

   (h) Installations for hydroelectric energy production;

   (i) Installations for the harnessing of wind power for energy production (wind farms);

(j) Installations for the capture of CO_2 streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations not covered by Annex I to this Directive.

4. PRODUCTION AND PROCESSING OF METALS

(a) Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting;

(b) Installations for the processing of ferrous metals:

(i) hot-rolling mills;

(ii) smitheries with hammers;

(iii) application of protective fused metal coats;

(c) Ferrous metal foundries;

(d) Installations for the smelting, including the alloyage, of non-ferrous metals, excluding precious metals, including recovered products (refining, foundry casting, etc.);

(e) Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process;

(f) Manufacture and assembly of motor vehicles and manufacture of motor-vehicle engines;

(g) Shipyards;

(h) Installations for the construction and repair of aircraft;

(i) Manufacture of railway equipment;

(j) Swaging by explosives;

(k) Installations for the roasting and sintering of metallic ores.

5. MINERAL INDUSTRY

(a) Coke ovens (dry coal distillation);

(b) Installations for the manufacture of cement;

(c) Installations for the production of asbestos and the manufacture of asbestos products (projects not included in Annex I);

(d) Installations for the manufacture of glass including glass fibre;

(e) Installations for smelting mineral substances including the production of mineral fibres;

(f) Manufacture of ceramic products by burning, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain.

6. CHEMICAL INDUSTRY (PROJECTS NOT INCLUDED IN ANNEX I)

(a) Treatment of intermediate products and production of chemicals;

(b) Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides;

(c) Storage facilities for petroleum, petrochemical and chemical products.

7. FOOD INDUSTRY

(a) Manufacture of vegetable and animal oils and fats;

(b) Packing and canning of animal and vegetable products;

(c) Manufacture of dairy products;

(d) Brewing and malting;

(e) Confectionery and syrup manufacture;

(f) Installations for the slaughter of animals;

(g) Industrial starch manufacturing installations;

(h) Fish-meal and fish-oil factories;

(i) Sugar factories.

8. TEXTILE, LEATHER, WOOD AND PAPER INDUSTRIES

(a) Industrial plants for the production of paper and board (projects not included in Annex I);

(b) Plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres or textiles;

(c) Plants for the tanning of hides and skins;

(d) Cellulose-processing and production installations.

9. RUBBER INDUSTRY

Manufacture and treatment of elastomer-based products.

10. INFRASTRUCTURE PROJECTS

(a) Industrial estate development projects;

(b) Urban development projects, including the construction of shopping centres and car parks;

(c) Construction of railways and intermodal transhipment facilities, and of intermodal terminals (projects not included in Annex I);

(d) Construction of airfields (projects not included in Annex I);

(e) Construction of roads, harbours and port installations, including fishing harbours (projects not included in Annex I);

(f) Inland-waterway construction not included in Annex I, canalisation and flood-relief works;

(g) Dams and other installations designed to hold water or store it on a long-term basis (projects not included in Annex I);

(h) Tramways, elevated and underground railways, suspended lines or similar lines of a particular type, used exclusively or mainly for passenger transport;

(i) Oil and gas pipeline installations and pipelines for the transport of CO_2 streams for the purposes of geological storage (projects not included in Annex I);

(j) Installations of long-distance aqueducts;

(k) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works;

(l) Groundwater abstraction and artificial groundwater recharge schemes not included in Annex I;

(m) Works for the transfer of water resources between river basins not included in Annex I.

11. OTHER PROJECTS

(a) Permanent racing and test tracks for motorised vehicles;

(b) Installations for the disposal of waste (projects not included in Annex I);

(c) Waste-water treatment plants (projects not included in Annex I);

(d) Sludge-deposition sites;

(e) Storage of scrap iron, including scrap vehicles;

(f) Test benches for engines, turbines or reactors;

(g) Installations for the manufacture of artificial mineral fibres;

(h) Installations for the recovery or destruction of explosive substances;

(i) Knackers' yards.

12. TOURISM AND LEISURE

(a) Ski runs, ski lifts and cable cars and associated developments;

(b) Marinas;

(c) Holiday villages and hotel complexes outside urban areas and associated developments;

(d) Permanent campsites and caravan sites;

(e) Theme parks.

13. (a) Any change or extension of projects listed in Annex I or this Annex, already authorised, executed or in the process of being executed, which may have significant adverse effects on the environment (change or extension not included in Annex I);

(b) Projects in Annex I, undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than two years.

ANNEX III

SELECTION CRITERIA REFERRED TO IN ARTICLE 4(3)

1. CHARACTERISTICS OF PROJECTS

The characteristics of projects must be considered having regard, in particular, to:

(a) the size of the project;

(b) the cumulation with other projects;

(c) the use of natural resources;

(d) the production of waste;

(e) pollution and nuisances;

(f) the risk of accidents, having regard in particular to substances or technologies used.

2. LOCATION OF PROJECTS

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, having regard, in particular, to:

(a) the existing land use;

(b) the relative abundance, quality and regenerative capacity of natural resources in the area;

(c) the absorption capacity of the natural environment, paying particular attention to the following areas:

(i) wetlands;

(ii) coastal zones;

(iii) mountain and forest areas;

(iv) nature reserves and parks;

(v) areas classified or protected under Member States' legislation; special protection areas designated by Member States pursuant to Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds [1] and to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [2];

(vi) areas in which the environmental quality standards laid down in Union legislation have already been exceeded;

(vii) densely populated areas;

(viii) landscapes of historical, cultural or archaeological significance.

3. CHARACTERISTICS OF THE POTENTIAL IMPACT

The potential significant effects of projects must be considered in relation to criteria set out in points 1 and 2, and having regard in particular to:

(a) the extent of the impact (geographical area and size of the affected population);

(b) the transfrontier nature of the impact;

(c) the magnitude and complexity of the impact;

(d) the probability of the impact;

(e) the duration, frequency and reversibility of the impact.

[1] OJ L 20, 26.1.2010, p. 7.
[2] OJ L 206, 22.7.1992, p. 7.

ANNEX IV

INFORMATION REFERRED TO IN ARTICLE 5(1)

1. A description of the project, including in particular:

   (a) a description of the physical characteristics of the whole project and the land-use requirements during the construction and operational phases;

   (b) a description of the main characteristics of the production processes, for instance, the nature and quantity of the materials used;

   (c) an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed project.

2. An outline of the main alternatives studied by the developer and an indication of the main reasons for this choice, taking into account the environmental effects.

3. A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.

4. A description [1] of the likely significant effects of the proposed project on the environment resulting from:

   (a) the existence of the project;

   (b) the use of natural resources;

   (c) the emission of pollutants, the creation of nuisances and the elimination of waste.

5. The description by the developer of the forecasting methods used to assess the effects on the environment referred to in point 4.

6. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

7. A non-technical summary of the information provided under headings 1 to 6.

8. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information.

[1] This description should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project.

ANNEX V

PART A

Repealed Directive with list of its successive amendments

(referred to in Article 14)

Council Directive 85/337/EEC
(OJ L 175, 5.7.1985, p. 40)

Council Directive 97/11/EC
(OJ L 73, 14.3.1997, p. 5)

Directive 2003/35/EC of the European Parliament and of the Council — Article 3 only
(OJ L 156, 25.6.2003, p. 17)

Directive 2009/31/EC of the European Parliament and of the Council — Article 31 only
(OJ L 140, 5.6.2009, p. 114)

PART B

List of time limits for transposition into national law

(referred to in Article 14)

Directive	Time limit for transposition
85/337/EEC	3 July 1988
97/11/EC	14 March 1999
2003/35/EC	25 June 2005
2009/31/EC	25 June 2011

ANNEX VI

Correlation table

Directive 85/337/EEC	This Directive
Article 1(1)	Article 1(1)
Article 1(2), first subparagraph	Article 1(2), introductory wording
Article 1(2), second subparagraph, introductory wording	Article 1(2)(a), introductory wording
Article 1(2), second subparagraph, first indent	Article 1(2), point (a), first indent
Article 1(2), second subparagraph, second indent	Article 1(2), point (a), second indent
Article 1(2), third subparagraph	Article 1(2), point (b)
Article 1(2), fourth subparagraph	Article 1(2), point (c)
Article 1(2), fifth subparagraph	Article 1(2), point (d)
Article 1(2), sixth subparagraph	Article 1(2), point (e)
Article 1(3)	Article 1(2), point (f)
Article 1(4)	Article 1(3)
Article 1(5)	Article 1(4)
Article 2(1)	Article 2(1)
Article 2(2)	Article 2(2)
Article 2(2a)	Article 2(3)
Article 2(3)	Article 2(4)
Article 3, introductory wording	Article 3, introductory wording
Article 3, first indent	Article 3, point (a)
Article 3, second indent	Article 3, point (b)
Article 3, third indent	Article 3, point (c)
Article 3, fourth indent	Article 3, point (d)
Article 4	Article 4
Article 5(1)	Article 5(1)
Article 5(2)	Article 5(2)
Article 5(3), introductory wording	Article 5(3), introductory wording
Article 5(3), first indent	Article 5(3), point (a)
Article 5(3), second indent	Article 5(3), point (b)
Article 5(3), third indent	Article 5(3), point (c)
Article 5(3), fourth indent	Article 5(3), point (d)
Article 5(3), fifth indent	Article 5(3), point (e)
Article 5(4)	Article 5(4)
Article 6	Article 6
Article 7(1), introductory wording	Article 7(1), first subparagraph, introductory wording

Directive 85/337/EEC	This Directive
Article 7(1), point (a)	Article 7(1), first subparagraph, point (a)
Article 7(1), point (b)	Article 7(1), first subparagraph, point (b)
Article 7(1), final wording	Article 7(1), second subparagraph
Article 7(2)-7(5)	Article 7(2)-7(5)
Article 8	Article 8
Article 9(1), introductory wording	Article 9, introductory wording
Article 9(1), first indent	Article 9(1), point (a)
Article 9(1), second indent	Article 9(1), point (b)
Article 9(1), third indent	Article 9(1), point (c)
Article 9(2)	Article 9(2)
Article 10	Article 10
Article 10a, first paragraph	Article 11(1)
Article 10a, second paragraph	Article 11(2)
Article 10a, third paragraph	Article 11(3)
Article 10a, fourth and fifth paragraphs	Article 11(4), first and second subparagraphs
Article 10a, sixth paragraph	Article 11(5)
Article 11(1)	Article 12(1)
Article 11(2)	Article 12(2)
Article 11(3)	—
Article 11(4)	Article 12(3)
Article 12(1)	—
Article 12(2)	Article 13
—	Article 14
—	Article 15
Article 14	Article 16
Annex I, point 1	Annex I, point 1
Annex I, point 2, first indent	Annex I, point 2(a)
Annex I, point 2, second indent	Annex I, point 2(b)
Annex I, point 3(a)	Annex I, point 3(a)
Annex I, point 3(b), introductory wording	Annex I, point 3(b), introductory wording
Annex I, point 3(b), first indent	Annex I, point 3(b)(i)
Annex I, point 3(b), second indent	Annex I, point 3(b)(ii)
Annex I, point 3(b), third indent	Annex I, point 3(b)(iii)
Annex I, point 3(b), fourth indent	Annex I, point 3(b)(iv)
Annex I, point 3(b), fifth indent	Annex I, point 3(b)(v)
Annex I, point 4, first indent	Annex I, point 4(a)

Directive 85/337/EEC	This Directive
Annex I, point 4, second indent	Annex I, point 4(b)
Annex I, point 5	Annex I, point 5
Annex I, point 6, introductory wording	Annex I, point 6, introductory wording
Annex I, point 6(i)	Annex I, point 6(a)
Annex I, point 6(ii)	Annex I, point 6(b)
Annex I, point 6(iii)	Annex I, point 6(c)
Annex I, point 6(iv)	Annex I, point 6(d)
Annex I, point 6(v)	Annex I, point 6(e)
Annex I, point 6(vi)	Annex I, point 6(f)
Annex I, points 7-15	Annex I, points 7-15
Annex I, point 16, introductory wording	Annex I, point 16, introductory wording
Annex I, point 16, first indent	Annex I, point 16(a)
Annex I, point 16, second indent	Annex I, point 16(b)
Annex I, points 17-21	Annex I, points 17-21
Annex I, point 22	Annex I, point 24
Annex I, point 23	Annex I, point 22
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Annex II, point 1	Annex II, point 1
Annex II, point 2(a), (b) and (c)	Annex II, point 2(a), (b) and (c)
Annex II, point 2(d), introductory wording	Annex II, point 2(d), introductory wording
Annex II, point 2(d), first indent	Annex II, point 2(d)(i)
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Annex IV, point 1, introductory wording	Annex IV, point 1, introductory wording
Annex IV, point 1, first indent	Annex IV, point 1(a)
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Annex IV, points 2 and 3	Annex IV, points 2 and 3
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Annex IV, point 4, first indent	Annex IV, point 4, first subparagraph, point (a)
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[1] Text with EEA relevance

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

II

(Non-legislative acts)

DECISIONS

COMMISSION IMPLEMENTING DECISION

of 28 February 2012

establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the manufacture of glass

(notified under document C(2012) 865)

(Text with EEA relevance)

(2012/134/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) ([1]) and in particular Article 13(5) thereof,

Whereas:

(1) Article 13(1) of Directive 2010/75/EU requires the Commission to organise an exchange of information on industrial emissions between it and Member States, the industries concerned and non-governmental organisations promoting environmental protection in order to facilitate the drawing up of best available techniques (BAT) reference documents as defined in Article 3(11) of that Directive.

(2) In accordance with Article 13(2) of Directive 2010/75/EU, the exchange of information is to address the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste and the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein and best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b) of Article 13(2) of that Directive.

([1]) OJ L 334, 17.12.2010, p. 17.

(3) 'BAT conclusions' as defined in Article 3(12) of Directive 2010/75/EU are the key element of BAT reference documents and lay down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

(4) In accordance with Article 14(3) of Directive 2010/75/EU, BAT conclusions are to be the reference for setting permit conditions for installations covered by Chapter 2 of that Directive.

(5) Article 15(3) of Directive 2010/75/EU requires the competent authority to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) of Directive 2010/75/EU.

(6) Article 15(4) of Directive 2010/75/EU provides for derogations from the requirement laid down in Article 15(3) only where the costs associated with the achievement of emissions levels disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned.

(7) Article 16(1) of Directive 2010/75/EU provides that the monitoring requirements in the permit referred to in point (c) of Article 14(1) of the Directive are to be based on the conclusions on monitoring as described in the BAT conclusions.

(8) In accordance with Article 21(3) of Directive 2010/75/EU, within 4 years of publication of decisions on BAT conclusions, the competent authority is to reconsider and, if necessary, update all the permit conditions and ensure that the installation complies with those permit conditions.

(9) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of Directive 2010/75/EU on industrial emissions [1] established a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

(10) In accordance with Article 13(4) of Directive 2010/75/EU, the Commission obtained the opinion [2] of that forum on the proposed content of the BAT reference document for the manufacture of glass on 13 September 2011 and made it publicly available.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The BAT conclusions for the manufacture of glass are set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 28 February 2012.

For the Commission
Janez POTOČNIK
Member of the Commission

[1] OJ C 146, 17.5.2011, p. 3.
[2] http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/opinions_article

ANNEX

BAT CONCLUSIONS FOR THE MANUFACTURE OF GLASS

SCOPE

These BAT conclusions concern the industrial activities specified in Annex I to Directive 2010/75/EU, namely:

— 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day;

— 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day.

These BAT conclusions do not address the following activities:

— Production of water glass, covered by the reference document Large Volume Inorganic Chemicals – Solids and Other Industry (LVIC-S)

— Production of polycrystalline wool

— Production of mirrors, covered by the reference document Surface Treatment Using Organic Solvents (STS)

Other reference documents which are of relevance for the activities covered by these BAT conclusions are the following:

Reference documents	Activity
Emissions from Storage (EFS)	Storage and handling of raw materials
Energy Efficiency (ENE)	General energy efficiency
Economic and Cross-Media Effects (ECM)	Economics and cross-media effects of techniques
General Principles of Monitoring (MON)	Emissions and consumption monitoring

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

DEFINITIONS

For the purposes of these BAT conclusions, the following definitions apply:

Term used	Definition
New plant	A plant introduced on the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant on the existing foundations of the installation following the publication of these BAT conclusions
Existing plant	A plant which is not a new plant
New furnace	A furnace introduced on the site of the installation following the publication of these BAT conclusions or a complete rebuild of a furnace following the publication of these BAT conclusions
Normal furnace rebuild	A rebuild between campaigns without a significant change in furnace requirements or technology and in which the furnace frame is not significantly adjusted and the furnace dimensions remain basically unchanged. The refractory of the furnace and, where appropriate, the regenerators are repaired by the full or partial replacement of the material.
Complete furnace rebuild	A rebuild involving a major change in the furnace requirements or technology and with major adjustment or replacement of the furnace and associated equipments.

GENERAL CONSIDERATIONS

Averaging periods and reference conditions for air emissions

Unless stated otherwise, emission levels associated with the best available techniques (BAT-AELs) for air emissions given in these BAT conclusions apply under the reference conditions shown in Table 1. All values for concentrations in waste gases refer to standard conditions: dry gas, temperature 273,15 K, pressure 101,3 kPa.

For discontinuous measurements	BAT-AELs refer to the average value of three spot samples of at least 30 minutes each; for regenerative furnaces the measuring period should cover a minimum of two firing reversals of the regenerator chambers
For continuous measurements	BAT-AELs refer to daily average values

Table 1

Reference conditions for BAT-AELs concerning air emissions

Activities		Unit	Reference conditions
Melting activities	Conventional melting furnace in continuous melters	mg/Nm^3	8 % oxygen by volume
	Conventional melting furnace in discontinuous melters	mg/Nm^3	13 % oxygen by volume
	Oxy-fuel-fired furnaces	kg/tonne melted glass	The expression of emission levels measured as mg/Nm^3 to a reference oxygen concentration is not applicable
	Electric furnaces	mg/Nm^3 or kg/tonne melted glass	The expression of emission levels measured as mg/Nm^3 to a reference oxygen concentration is not applicable
	Frit melting furnaces	mg/Nm^3 or kg/tonne melted frit	Concentrations refer to 15 % oxygen by volume. When air-gas firing is used, BAT AELs expressed as emission concentration (mg/Nm^3) apply. When only oxy-fuel firing is employed, BAT AELs expressed as specific mass emissions (kg/tonne melted frit) apply. When oxygen-enriched air-fuel firing is used, BAT AELs expressed as either emission concentration (mg/Nm^3) or as specific mass emissions (kg/tonne melted frit) apply
	All type of furnaces	kg/tonne melted glass	The specific mass emissions refer to 1 tonne of melted glass
Non-melting activities, including downstream processes	All processes	mg/Nm^3	No correction for oxygen
	All processes	kg/tonne glass	The specific mass emissions refer to 1 tonne of produced glass

Conversion to reference oxygen concentration

The formula for calculating the emissions concentration at a reference oxygen level (see Table 1) is shown below.

$$E_R = \frac{21 - O_R}{21 - O_M} \times E_M$$

Where:

E_R (mg/Nm^3): emissions concentration corrected to the reference oxygen level O_R

O_R (vol %): reference oxygen level

E_M (mg/Nm^3): emissions concentration referred to the measured oxygen level O_M

O_M (vol %): measured oxygen level.

Conversion from concentrations to specific mass emissions

BAT-AELs given in Sections 1.2 to 1.9 as specific mass emissions (kg/tonne melted glass) are based on the calculation reported below except for oxy-fuel fired furnaces and, in a limited number of cases, for electric melting where BAT-AELs given in kg/tonne melted glass were derived from specific reported data.

The calculation procedure used for the conversion from concentrations to specific mass emissions is shown below.

Specific mass emission (kg/tonne of melted glass) = conversion factor × emissions concentration (mg/Nm^3)

Where: conversion factor = $(Q/P) \times 10^{-6}$

with Q = waste gas volume in Nm^3/h

P = pull rate in tonnes of melted glass/h.

The waste gas volume (Q) is determined by the specific energy consumption, type of fuel, and the oxidant (air, air enriched by oxygen and oxygen with purity depending on the production process). The energy consumption is a complex function of (predominantly) the type of furnace, the type of glass and the cullet percentage.

However, a range of factors can influence the relationship between concentration and specific mass flow, including:

— type of furnace (air preheating temperature, melting technique)

— type of glass produced (energy requirement for melting)

— energy mix (fossil fuel/electric boosting)

— type of fossil fuel (oil, gas)

— type of oxidant (oxygen, air, oxygen-enriched air)

— cullet percentage

— batch composition

— age of the furnace

— furnace size.

The conversion factors given in Table 2 have been used for converting BAT-AELs from concentrations into specific mass emissions.

The conversion factors have been determined on the basis of energy efficient furnaces and relate only to full air/fuel-fired furnaces.

Table 2

Indicative factors used for converting mg/Nm^3 into kg/tonne of melted glass based on energy efficient fuel-air furnaces

Sectors		Factors to convert mg/Nm^3 into kg/tonne of melted glass
Flat glass		$2,5 \times 10^{-3}$
Container glass	General case	$1,5 \times 10^{-3}$
	Specific cases [1]	Case-by-case study (often $3,0 \times 10^{-3}$)
Continuous filament glass fibre		$4,5 \times 10^{-3}$

Sectors		Factors to convert mg/Nm^3 into kg/tonne of melted glass
Domestic glass	Soda lime	$2,5 \times 10^{-3}$
	Specific cases (2)	Case-by-case study (between 2,5 and > 10×10^{-3}; often $3,0 \times 10^{-3}$)
Mineral wool	Glass wool	2×10^{-3}
	Stone wool cupola	$2,5 \times 10^{-3}$
Special glass	TV glass (panels)	3×10^{-3}
	TV glass (funnel)	$2,5 \times 10^{-3}$
	Borosilicate (tube)	4×10^{-3}
	Glass ceramics	$6,5 \times 10^{-3}$
	Lighting glass (soda-lime)	$2,5 \times 10^{-3}$
Frits		Case-by-case study (between $5 - 7,5 \times 10^{-3}$)

(1) Specific cases correspond to less favourable cases (i.e. small special furnaces with a production of generally below 100 tonnes/day and a cullet rate of below 30 %). This category represents only 1 or 2 % of the container glass production.
(2) Specific cases corresponding to less favourable cases and/or non-soda-lime glasses: borosilicates, glass ceramic, crystal glass and, less frequently, lead crystal glass.

DEFINITIONS FOR CERTAIN AIR POLLUTANTS

For the purpose of these BAT conclusions and for the BAT-AELs reported in Sections 1.2 to 1.9, the following definitions apply:

NO_X expressed as NO_2	The sum of nitrogen oxide (NO) and nitrogen dioxide (NO_2) expressed as NO_2
SO_X expressed as SO_2	The sum of sulphur dioxide (SO_2) and sulphur trioxide (SO_3) expressed as SO_2
Hydrogen chloride expressed as HCl	All gaseous chlorides expressed as HCl
Hydrogen fluoride expressed as HF	All gaseous fluorides expressed as HF

AVERAGING PERIODS FOR WASTE WATER DISCHARGES

Unless stated otherwise, emission levels associated with the best available techniques (BAT-AELs) for waste water emissions given in these BAT conclusions refer to the average value of a composite sample taken over a period of 2 hours or 24 hours.

1.1. *General BAT conclusions for the manufacture of glass*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all installations.

The process-specific BAT included in Sections 1.2 – 1.9 apply in addition to the general BAT mentioned in this section.

1.1.1. Environmental management systems

1. BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

(i) commitment of the management, including senior management;

(ii) definition of an environmental policy that includes the continuous improvement for the installation by the management;

(iii) planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;

(iv) implementation of the procedures paying particular attention to:

(a) structure and responsibility

(b) training, awareness and competence

(c) communication

(d) employee involvement

(e) documentation

(f) efficient process control

(g) maintenance programmes

(h) emergency preparedness and response

(i) safeguarding compliance with environmental legislation.

(v) checking performance and taking corrective action, paying particular attention to:

(a) monitoring and measurement (see also the reference document on the General Principles of Monitoring)

(b) corrective and preventive action

(c) maintenance of records

(d) independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

(vi) review of the EMS and its continuing suitability, adequacy and effectiveness by senior management;

(vii) following the development of cleaner technologies;

(viii) consideration for the environmental impacts from the eventual decommissioning of the installation at the stage of designing a new plant, and throughout its operating life;

(ix) application of sectoral benchmarking on a regular basis.

Applicability

The scope (e.g. level of details) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2. Energy efficiency

2. BAT is to reduce the specific energy consumption by using one or a combination of the following techniques:

Technique	Applicability
(i) Process optimisation, through the control of the operating parameters	The techniques are generally applicable
(ii) Regular maintenance of the melting furnace	
(iii) Optimisation of the furnace design and the selection of the melting technique	Applicable for new plants. For existing plants, the implementation requires a complete rebuild of the furnace
(iv) Application of combustion control techniques	Applicable to fuel/air and oxy-fuel fired furnaces

Technique	Applicability
(v) Use of increasing levels of cullet, where available and economically and technically viable	Not applicable to the continuous filament glass fibre, high temperature insulation wool and frits sectors
(vi) Use of a waste heat boiler for energy recovery, where technically and economically viable	Applicable to fuel/air and oxy-fuel fired furnaces. The applicability and economic viability of the technique is dictated by the overall efficiency that may be obtained, including the effective use of the steam generated
(vii) Use of batch and cullet preheating, where technically and economically viable	Applicable to fuel/air and oxy-fuel fired furnaces. The applicability is normally restricted to batch compositions with more than 50 % cullet

1.1.3. Materials storage and handling

3. BAT is to prevent, or where that is not practicable, to reduce diffuse dust emissions from the storage and handling of solid materials by using one or a combination of the following techniques:

I. Storage of raw materials

(i) Store bulk powder materials in enclosed silos equipped with a dust abatement system (e.g. fabric filter)

(ii) Store fine materials in enclosed containers or sealed bags

(iii) Store under cover stockpiles of coarse dusty materials

(iv) Use of road cleaning vehicles and water damping techniques

II. Handling of raw materials

Technique	Applicability
(i) For materials which are transported by above ground, use enclosed conveyors to prevent material loss	The techniques are generally applicable
(ii) Where pneumatic conveying is used, apply a sealed system equipped with a filter to clean the transport air before release	
(iii) Moistening of the batch	The use of this technique is limited by the negative consequences on the furnace energy efficiency. Restrictions may apply to some batch formulations, in particular for borosilicate glass production
(iv) Application of a slightly negative pressure within the furnace	Applicable only as an inherent aspect of operation (i.e. melting furnaces for frits production) due to a detrimental impact on furnace energy efficiency
(v) Use of raw materials that do not cause decrepitation phenomena (mainly dolomite and limestone). These phenomena consist of minerals that 'crackle' when exposed to heat, with a consequent potential increase of dust emissions	Applicable within the constraints associated with the availability of raw materials
(vi) Use of an extraction which vents to a filter system in processes where dust is likely to be generated (e.g. bag opening, frits batch mixing, fabric filter dust disposal, cold-top melters)	The techniques are generally applicable
(vii) Use of enclosed screw feeders	
(viii) Enclosure of feed pockets	Generally applicable. Cooling may be necessary to avoid damage to the equipment

4. BAT is to prevent, or where that is not practicable, to reduce diffuse gaseous emissions from the storage and handling of volatile raw materials by using one or a combination of the following techniques:

(i) Use of tank paint with low solar absorbency for bulk storage subject to temperature changes due to solar heating.

(ii) Control of temperature in the storage of volatile raw materials.

(iii) Tank insulation in the storage of volatile raw materials.

(iv) Inventory management

(v) Use of floating roof tanks in the storage of large quantities of volatile petroleum products.

(vi) Use of vapour return transfer systems in the transfer of volatile fluids (e.g. from tank trucks to storage tank).

(vii) Use of bladder roof tanks in the storage of liquid raw materials.

(viii) Use of pressure/vacuum valves in tanks designed to withstand pressure fluctuations.

(ix) Application of a release treatment (e.g. adsorption, absorption, condensation) in the storage of hazardous materials.

(x) Application of subsurface filling in the storage of liquids that tend to foam.

1.1.4. General primary techniques

5. BAT is to reduce energy consumption and emissions to air by carrying out a constant monitoring of the operational parameters and a programmed maintenance of the melting furnace.

Technique	Applicability
The technique consists of a series of monitoring and maintenance operations which can be used individually or in combination appropriate to the type of furnace, with the aim of minimising the ageing effects on the furnace, such as sealing the furnace and burner blocks, keep the maximum insulation, control the stabilised flame conditions, control the fuel/air ratio, etc.	Applicable to regenerative, recuperative, and oxy-fuel fired furnaces. The applicability to other types of furnaces requires an installation-specific assessment

6. BAT is to carry out a careful selection and control of all substances and raw materials entering the melting furnace in order to reduce or prevent emissions to air by using one or a combination of the following techniques.

Technique	Applicability
(i) Use of raw materials and external cullet with low levels of impurities (e.g. metals, chlorides, fluorides)	Applicable within the constraints of the type of glass produced at the installation and the availability of raw materials and fuels
(ii) Use of alternative raw materials (e.g. less volatile)	
(iii) Use of fuels with low metal impurities	

7. BAT is to carry out monitoring of emissions and/or other relevant process parameters on a regular basis, including the following:

Technique	Applicability
(i) Continuous monitoring of critical process parameters to ensure process stability, e.g. temperature, fuel feed and airflow	The techniques are generally applicable
(ii) Regular monitoring of process parameters to prevent/reduce pollution, e.g. O_2 content of the combustion gases to control the fuel/air ratio.	
(iii) Continuous measurements of dust, NO_X and SO_2 emissions or discontinuous measurements at least twice per year, associated with the control of surrogate parameters to ensure that the treatment system is working properly between measurements	
(iv) Continuous or regular periodic measurements of NH_3 emissions, when selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) techniques are applied	The techniques are generally applicable
(v) Continuous or regular periodic measurements of CO emissions when primary techniques or chemical reduction by fuel techniques are applied for NO_X emissions reductions or partial combustion may occur.	
(vi) Regular periodic measurements of emissions of HCl, HF, CO and metals, in particular when raw materials containing such substances are used or partial combustion may occur	The techniques are generally applicable
(vii) Continuous monitoring of surrogate parameters to ensure that the waste gas treatment system is working properly and that the emission levels are maintained between discontinuous measurements. The monitoring of surrogate parameters includes: reagent feed, temperature, water feed, voltage, dust removal, fan speed, etc.	

8. BAT is to operate the waste gas treatment systems during normal operating conditions at optimal capacity and availability in order to prevent or reduce emissions

Applicability

Special procedures can be defined for specific operating conditions, in particular:

(i) during start-up and shutdown operations

(ii) during other special operations which could affect the proper functioning of the systems (e.g. regular and extra-ordinary maintenance work and cleaning operations of the furnace and/or of the waste gas treatment system, or severe production change)

(iii) in the case of insufficient waste gas flow or temperature which prevents the use of the system at full capacity.

9. BAT is to limit carbon monoxide (CO) emissions from the melting furnace, when applying primary techniques or chemical reduction by fuel, for the reduction of NO_X emissions

Technique	Applicability
Primary techniques for the reduction of NO_X emissions are based on combustion modifications (e.g. reduction of air/fuel ratio, staged combustion low-NO_X burners, etc.). Chemical reduction by fuel consists of the addition of hydrocarbon fuel to the waste gas stream to reduce the NO_X formed in the furnace. The increase in CO emissions due to the application of these techniques can be limited by a careful control of the operational parameters	Applicable to conventional air/fuel fired furnaces.

Table 3

BAT-AELs for carbon monoxide emissions from melting furnaces

Parameter	BAT-AEL
Carbon monoxide, expressed as CO	< 100 mg/Nm^3

10. BAT is to limit ammonia (NH_3) emissions, when applying selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) techniques for a high efficiency NO_X emissions reduction

Technique	Applicability
The technique consists of adopting and maintaining suitable operating conditions of the SCR or SNCR waste gas treatment systems, with the aim of limiting emissions of unreacted ammonia	Applicable to melting furnaces fitted with SCR or SNCR

Table 4

BAT-AELs for ammonia emissions, when SCR or SNCR techniques are applied

Parameter	BAT-AELs ([1])
Ammonia, expressed as NH_3	< 5 – 30 mg/Nm^3

([1]) The higher levels are associated with higher inlet NO_X concentrations, higher reduction rates and the ageing of the catalyst.

11. BAT is to reduce boron emissions from the melting furnace, when boron compounds are used in the batch formulation, by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Operation of a filtration system at a suitable temperature for enhancing the separation of boron compounds in the solid state, taking into account that some boric acid species may be present in the flue-gas as gaseous compounds at temperatures below 200 °C, but also as low as 60 °C	The applicability to existing plants may be limited by technical constraints associated with the position and characteristics of the existing filter system
(ii) Use of dry or semi-dry scrubbing in combination with a filtration system	The applicability may be limited by a decreased removal efficiency of other gaseous pollutants (SO_X, HCl, HF) caused by the deposition of boron compounds on the surface of the dry alkaline reagent
(iii) Use of wet scrubbing	The applicability to existing plants may be limited by the need of a specific waste water treatment

([1]) A description of the techniques is given in Sections 1.10.1, 1.10.4 and 1.10.6.

Monitoring

The monitoring of boron emissions should be carried out according to a specific methodology which allows measurement of both solid and gaseous forms and to determine the effective removal of these species from the flue gases.

1.1.5. Emissions to water from glass manufacturing processes

12. BAT is to reduce water consumption by using one or a combination of the following techniques:

Technique	Applicability
(i) Minimisation of spillages and leaks	The technique is generally applicable
(ii) Reuse of cooling and cleaning waters after purging	The technique is generally applicable. Recirculation of scrubbing water is applicable to most scrubbing systems; however, periodic discharge and replacement of the scrubbing medium may be necessary

Technique	Applicability
(iii) Operate a quasi-closed loop water system as far as technically and economically feasible	The applicability of this technique may be limited by the constraints associated with the safety management of the production process. In particular: — open circuit cooling may be used when safety issues require for it (e.g. incidents when large quantities of glass need to be cooled) — water used in some specific process (e.g. downstream activities in the continuous filament glass fibre sector, acid polishing in the domestic and special glass sectors, etc.) may have to be discharged in total or in part to the waste water treatment system

13. BAT is to reduce the emission load of pollutants in the waste water discharges by using one or a combination of the following waste water treatment systems:

Technique	Applicability
(i) Standard pollution control techniques, such as settlement, screening, skimming, neutralisation, filtration, aeration, precipitation, coagulation and flocculation, etc. Standard good practice techniques to control emissions from storage of liquid raw materials and intermediates, such as containments, inspection/testing of tanks, overfill protection, etc.	The techniques are generally applicable
(ii) Biological treatment systems, such as activated sludge, biofiltration to remove/degrade the organic compounds	The applicability is limited to the sectors which use organic substances in the production process (e.g. continuous filament glass fibre and mineral wool sectors)
(iii) Discharge to municipal waste water treatment Plants	Applicable to installations where further reduction of pollutants is necessary
(iv) External reuse of waste waters	The applicability is generally limited to the frits sector (possible reuse in the ceramic industry)

Table 5

BAT-AELs for waste water discharges to surface waters from the manufacture of glass

Parameter [1]	Unit	BAT-AEL [2] (composite sample)
pH	—	6,5 – 9
Total suspended solids	mg/l	< 30
Chemical oxygen demand (COD)	mg/l	< 5 – 130 [3]
Sulphates, expressed as SO_4^{2-}	mg/l	< 1 000
Fluorides, expressed as F^-	mg/l	< 6 [4]
Total hydrocarbons	mg/l	< 15 [5]
Lead, expressed as Pb	mg/l	< 0,05 – 0,3 [6]
Antimony, expressed as Sb	mg/l	< 0,5
Arsenic, expressed as As	mg/l	< 0,3
Barium, expressed as Ba	mg/l	< 3,0

Parameter (1)	Unit	BAT-AEL (2) (composite sample)
Zinc, expressed as Zn	mg/l	< 0,5
Copper, expressed as Cu	mg/l	< 0,3
Chromium, expressed as Cr	mg/l	< 0,3
Cadmium, expressed as Cd	mg/l	< 0,05
Tin, expressed as Sn	mg/l	< 0,5
Nickel, expressed as Ni	mg/l	< 0,5
Ammonia, expressed as NH_4	mg/l	< 10
Boron, expressed as B	mg/l	< 1 – 3
Phenol	mg/l	< 1

(1) The relevance of the pollutants listed in the table depends on the sector of the glass industry and on the different activities carried out at the plant.
(2) The levels refer to a composite sample taken over a time period of 2 hours or 24 hours.
(3) For the continuous filament glass fibre sector, BAT-AEL is < 200 mg/l.
(4) The level refers to treated water coming from activities involving acid polishing.
(5) In general, total hydrocarbons are composed of mineral oils.
(6) The higher level of the range is associated with downstream processes for the production of lead crystal glass.

1.1.6. Waste from the glass manufacturing processes

14. BAT is to reduce the production of solid waste to be disposed of by using one or a combination of the following techniques:

Technique	Applicability
(i) Recycling of waste batch materials, where quality requirements allow for it	The applicability may be limited by the constraints associated with the quality of the final glass product
(ii) Minimising material losses during the storage and handling of raw materials	The technique is generally applicable
(iii) Recycling of internal cullet from rejected production	Generally, not applicable to the continuous filament glass fibre, high temperature insulation wool and frits sectors
(iv) Recycling of dust in the batch formulation where quality requirements allow for it	The applicability may be limited by different factors: — quality requirements of the final glass product — cullet percentage used in the batch formulation — potential carryover phenomena and corrosion of the refractory materials — sulphur balance constraints
(v) Valorisation of solid waste and/or sludge through appropriate use on-site (e.g. sludge from water treatment) or in other industries	Generally applicable to the domestic glass sector (for lead crystal cutting sludge) and to the container glass sector (fine particles of glass mixed with oil). Limited applicability to other glass manufacturing sectors due to unpredictable, contaminated composition, low volumes and economic viability
(vi) Valorisation of end-of-life refractory materials for possible use in other industries	The applicability is limited by the constraints imposed by the refractory manufacturers and potential end-users
(vii) Applying cement bonded briquetting of waste for recycling into hot blast cupola furnaces where quality requirements allow for it	The applicability of cement bonded briquetting of waste is limited to the stone wool sector. A trade-off approach between air emissions and the generation of solid waste stream should be undertaken

1.1.7. Noise from the glass manufacturing processes

15. BAT is to reduce noise emissions by using one or a combination of the following techniques:

(i) Make an environmental noise assessment and formulate a noise management plan as appropriate to the local environment

(ii) Enclose noisy equipment/operation in a separate structure/unit

(iii) Use embankments to screen the source of noise

(iv) Carry out noisy outdoor activities during the day

(v) Use noise protection walls or natural barriers (trees, bushes) between the installation and the protected area, on the basis of local conditions.

1.2. *BAT conclusions for container glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all container glass manufacturing installations.

1.2.1. Dust emissions from melting furnaces

16. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying a flue-gas cleaning system such as an electrostatic precipitator or a bag filter.

Technique ([1])	Applicability
The flue-gas cleaning systems consist of end-of-pipe techniques based on the filtration of all materials that are solid at the point of measurement	The technique is generally applicable

([1]) A description of filtration systems (i.e. electrostatic precipitator, bag filter) is given in Section 1.10.1.

Table 6

BAT-AELs for dust emissions from the melting furnace in the container glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Dust	< 10 – 20	< 0,015 – 0,06

([1]) The conversion factors of $1,5 \times 10^{-3}$ and 3×10^{-3} have been used for the determination of the lower and higher value of the range respectively.

1.2.2. Nitrogen oxides (NO_X) from melting furnaces

17. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

I. primary techniques, such as:

Technique ([1])	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)

Technique [1]	Applicability
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Special furnace design	The applicability is limited to batch formulations that contain high levels of external cullet (> 70 %). The application requires a complete rebuild of the melting furnace. The shape of the furnace (long and narrow) may pose space restrictions
(iii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iv) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

II. secondary techniques, such as:

Technique [1]	Applicability
(i) Selective catalytic reduction (SCR)	The application may require an upgrade of the dust abatement system in order to guarantee a dust concentration of below 10 – 15 mg/Nm^3 and a desulphurisation system for the removal of SO_X emissions. Due to the optimum operating temperature window, the applicability is limited to the use of electrostatic precipitators. In general, the technique is not used with a bag filter system because the low operating temperature, in the range of 180 – 200 °C, would require reheating of the waste gases. The implementation of the technique may require significant space availability
(ii) Selective non-catalytic reduction(SNCR)	The technique is applicable to recuperative furnaces. Very limited applicability to conventional regenerative furnaces, where the correct temperature window is difficult to access or does not allow a good mixing of the flue-gases with the reagent. It may be applicable to new regenerative furnaces equipped with split regenerators; however, the temperature window is difficult to maintain due to the reversal of fire between the chambers that causes a cyclical temperature change

[1] A description of the techniques is given in Section 1.10.2.

Table 7

BAT-AELs for NO_X emissions from the melting furnace in the container glass sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Combustion modifications, special furnace designs (2) (3)	500 – 800	0,75 – 1,2
	Electric melting	< 100	< 0,3
	Oxy-fuel melting (4)	Not applicable	< 0,5 – 0,8
	Secondary techniques	< 500	< 0,75

(1) The conversion factor reported in Table 2 for general cases ($1,5 \times 10^{-3}$) has been applied, with the exception of electric melting (specific cases: 3×10^{-3}).
(2) The lower value refers to the use of special furnace designs, where applicable.
(3) These values should be reconsidered in the occasion of a normal or complete rebuild of the melting furnace.
(4) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

18. When nitrates are used in the batch formulation and/or special oxidising combustion conditions are required in the melting furnace for ensuring the quality of the final product, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with primary or secondary techniques

The BAT-AELs are set out in Table 7.

If nitrates are used in the batch formulation for short campaigns or for melting furnaces with a capacity of < 100 t/day, the BAT-AEL is set out in Table 8.

Technique (1)	Applicability
Primary techniques: — Minimising the use of nitrates in the batch formulation The use of nitrates is applied for very high quality products (i.e. flacconage, perfume bottles and cosmetic containers). Effective alternative materials are sulphates, arsenic oxides, cerium oxide. The application of process modifications (e.g. special oxidising combustion conditions) represents an alternative to the use of nitrates	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

(1) A description of the techniques is given in Section 1.10.2.

Table 8

BAT-AEL for NO_X emissions from the melting furnace in the container glass sector, when nitrates are used in the batch formulation and/or special oxidising combustion conditions in cases of short campaigns or for melting furnaces with a capacity of < 100 t/day

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Primary techniques	< 1 000	< 3

(1) The conversion factor reported in Table 2 for specific cases (3×10^{-3}) has been applied.

1.2.3. Sulphur oxides (SO_X) from melting furnaces

19. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(ii) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of the sulphur content in the batch formulation is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust). The effective reduction of SO_X emissions depends on the retention of sulphur compounds in the glass which may vary significantly depending on the glass type
(iii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

(1) A description of the techniques is given in Section 1.10.3.

Table 9

BAT-AELs for SO_X emissions from the melting furnace in the container glass sector

Parameter	Fuel	BAT-AEL (1) (2)	
		mg/Nm^3	kg/tonne melted glass (3)
SO_X expressed as SO_2	Natural gas	< 200 – 500	< 0,3 – 0,75
	Fuel oil (4)	< 500 – 1 200	< 0,75 – 1,8

(1) For special types of coloured glasses (e.g. reduced green glasses), concerns related to the achievable emission levels may require investigating the sulphur balance. Values reported in the table may be difficult to achieve in combination with filter dust recycling and the rate of recycling of external cullet.
(2) The lower levels are associated with conditions where the reduction of SO_X is a high priority over a lower production of solid waste corresponding to the sulphate-rich filter dust.
(3) The conversion factor reported in Table 2 for general cases ($1,5 \times 10^{-3}$) has been applied.
(4) The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.

1.2.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

20. BAT is to reduce HCl and HF emissions from the melting furnace (possibly combined with flue-gases from hot-end coating activities) by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the type of glass produced at the installation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.4.

Table 10

BAT-AELs for HCl and HF emissions from the melting furnace in the container glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2)	< 10 – 20	< 0,02 – 0,03
Hydrogen fluoride, expressed as HF	< 1 – 5	< 0,001 – 0,008

(1) The conversion factor for general cases, reported in Table 2 ($1,5 \times 10^{-3}$) has been applied.
(2) The higher levels are associated with the simultaneous treatment of flue-gases from hot-end coating operations.

1.2.5. Metals from melting furnaces

21. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of the raw materials
(ii) Minimising the use of metal compounds in the batch formulation, where colouring and decolourising of glass is needed, subject to consumer glass quality requirements	
(iii) Applying a filtration system (bag filter or electrostatic precipitator)	The techniques are generally applicable
(iv) Applying a dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 11

BAT-AELs for metal emissions from the melting furnace in the container glass sector

Parameter	BAT-AEL (1) (2) (3)	
	mg/Nm^3	kg/tonne melted glass (4)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1 (5)	$< 0,3 – 1,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	$< 1,5 – 7,5 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The lower levels are BAT-AELs when metal compounds are not intentionally used in the batch formulation.
(3) The upper levels are associated with the use of metals for colouring or decolourising the glass, or when the flue-gases from the hot-end coating operations are treated together with the melting furnace emissions.
(4) The conversion factor for general cases, reported in Table 2 ($1,5 \times 10^{-3}$) has been applied.
(5) In specific cases, when high quality flint glass is produced requiring higher amounts of selenium for decolourising (depending on the raw materials), higher values are reported, up to 3 mg/Nm^3.

1.2.6. Emissions from downstream processes

22. When tin, organotin or titanium compounds are used for hot-end coating operations, BAT is to reduce emissions by using one or a combination of the following techniques:

Technique	Applicability
(i) Minimising the losses of the coating product by ensuring a good sealing of the application system and applying an effective extracting hood. A good construction and sealing of the application system is essential for minimising losses of unreacted product into the air	The technique is generally applicable

Technique	Applicability
(ii) Combining the flue-gas from the coating operations with the waste gas from the melting furnace or with the combustion air of the furnace, when a secondary treatment system is applied (filter and dry or semi-dry scrubber). Based on the chemical compatibility, the waste gases from the coating operations may be combined with other flue-gases before treatment. These two options may be applied: — combination with the flue gases from the melting furnace, upstream of a secondary abatement system (dry or semi-dry scrubbing plus filtration system) — combination with combustion air before entering the regenerator, followed by secondary abatement treatment of the waste gases generated during the melting process (dry or semi-dry scrubbing + filtration system)	The combination with flue gases from the melting furnace is generally applicable. The combination with combustion air may be affected by technical constraints due to some potential effects on the glass chemistry and on the regenerator materials
(iii) Applying a secondary technique, e.g. wet scrubbing, dry scrubbing plus filtration ([1])	The techniques are generally applicable

([1]) A description of the techniques is given in Sections 1.10.4 and 1.10.7.

Table 12

BAT-AELs for air emissions from hot-end coating activities in the container glass sector when the flue-gases from downstream operations are treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	< 10
Titanium compounds expressed as Ti	< 5
Tin compounds, including organotin, expressed as Sn	< 5
Hydrogen chloride, expressed as HCl	< 30

23. When SO_3 is used for surface treatment operations, BAT is to reduce SO_X emissions by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the product losses by ensuring a good sealing of the application system A good construction and maintenance of the application system is essential for minimising the losses of unreacted product into the air	The techniques are generally applicable
(ii) Applying a secondary technique, e.g. wet scrubbing	

([1]) A description of the techniques is given in Section 1.10.6.

Table 13

BAT-AEL for SO_X emissions from downstream activities when SO_3 is used for surface treatment operations in the container glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
SO_x, expressed as SO_2	< 100 – 200

1.3. *BAT conclusions for flat glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all flat glass manufacturing installations.

1.3.1. Dust emissions from melting furnaces

24. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying an electrostatic precipitator or a bag filter system

A description of the techniques is given in Section 1.10.1.

Table 14

BAT-AELs for dust emissions from the melting furnace in the flat glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Dust	< 10 – 20	< 0,025 – 0,05

([1]) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.

1.3.2. Nitrogen oxides (NO_X) from melting furnaces

25. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

I. primary techniques, such as:

Technique ([1])	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	The applicability is restricted to small capacity furnaces for the production of specialty flat glass and under installation-specific circumstances, due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State

Technique [1]	Applicability
(ii) Fenix process Based on the combination of a number of primary techniques for the optimisation of the combustion of cross-fired regenerative float furnaces. The main features are: — reduction of excess air — suppression of hotspots and homogenisation of the flame temperatures — controlled mixing of the fuel and combustion air	The applicability is limited to cross-fired regenerative furnaces. Applicable to new furnaces. For existing furnaces, the technique requires being directly integrated during the design and construction of the furnace, at a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

II. secondary techniques, such as:

Technique [1]	Applicability
(i) Chemical reduction by fuel	Applicable to regenerative furnaces. The applicability is limited by an increased fuel consumption and consequent environmental and economic impact
(ii) Selective catalytic reduction (SCR)	The application may require an upgrade of the dust abatement system in order to guarantee a dust concentration of below 10 – 15 mg/Nm^3 and a desulphurisation system for the removal of SO_X emissions Due to the optimum operating temperature window, the applicability is limited to the use of electrostatic precipitators. In general, the technique is not used with a bag filter system because the low operating temperature, in the range of 180 – 200 °C, would require reheating of the waste gases. The implementation of the technique may require significant space availability

[1] A description of the techniques is given in Section 1.10.2.

Table 15

BAT-AELs for NO_X emissions from the melting furnace in the flat glass sector

Parameter	BAT	BAT-AEL [1]	
		mg/Nm^3	kg/tonne melted glass [2]
NO_X expressed as NO_2	Combustion modifications, Fenix process [3]	700 – 800	1,75 – 2,0
	Oxy-fuel melting [4]	Not applicable	< 1,25 – 2,0
	Secondary techniques [5]	400 – 700	1,0 – 1,75

[1] Higher emission levels are expected when nitrates are used occasionally for the production of special glasses.
[2] The conversion factor reported in Table 2 (2,5 × 10^{-3}) has been applied.
[3] The lower levels of the range are associated with the application of the Fenix process.
[4] The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).
[5] The higher levels of the range are associated with existing plants until a normal or complete rebuild of the melting furnace. The lower levels are associated with newer/retrofitted plants.

26. When nitrates are used in the batch formulation, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with primary or secondary techniques. If secondary techniques are applied, the BAT-AELs reported in Table 15 are applicable.

If nitrates are used in the batch formulation for the production of special glasses in a limited number of short campaigns, the BAT-AELs are set out in Table 16.

Technique [1]	Applicability
Primary techniques: minimising the use of nitrates in the batch formulation The use of nitrates is applied for special productions (i.e. coloured glass). Effective alternative materials are sulphates, arsenic oxides, cerium oxide	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

[1] A description of the technique is given in Section 1.10.2.

Table 16

BAT-AEL for NO_X emissions from the melting furnace in the flat glass sector, when nitrates are used in the batch formulation for the production of special glasses in a limited number of short campaigns

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass [1]
NO_X expressed as NO_2	Primary techniques	< 1 200	< 3

[1] The conversion factor reported in Table 2 for specific cases ($2,5 \times 10^{-3}$) has been applied

1.3.3. Sulphur oxides (SO_X) from melting furnaces

27. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(ii) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of the sulphur content in the batch formulation is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust)
(iii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

[1] A description of the techniques is given in Section 1.10.3.

Table 17

BAT-AELs for SO_X emissions from the melting furnace in the flat glass sector

Parameter	Fuel	BAT-AEL [1]	
		mg/Nm^3	kg/tonne melted glass [2]
SO_x expressedas SO_2	Natural gas	< 300 – 500	< 0,75 – 1,25
	Fuel oil [3] [4]	500 – 1 300	1,25 – 3,25

[1] The lower levels are associated with conditions where the reduction of SO_X has a high priority over a lower production of solid waste corresponding to the sulphate-rich filter dust.
[2] The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.
[3] The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.
[4] For large flat glass furnaces, concerns related to the achievable emission levels may require investigating the sulphur balance. Values reported in the table may be difficult to achieve in combination with filter dust recycling.

1.3.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

28. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the type of glass produced at the installation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.4.

Table 18

BAT-AELs for HCl and HF emissions from the melting furnace in the flat glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2)	< 10 – 25	< 0,025 – 0,0625
Hydrogen fluoride, expressed as HF	< 1 – 4	< 0,0025 – 0,010

(1) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.
(2) The higher levels of the range are associated with the recycling of filter dust in the batch formulation

1.3.5. Metals from melting furnaces

29. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of the raw materials.
(ii) Applying a filtration system	The technique is generally applicable
(iii) Applying a dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 19

BAT-AELs for metal emissions from the melting furnace in the flat glass sector, with the exception of selenium coloured glasses

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1	$< 0,5 – 2,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	$< 2,5 – 12,5 \times 10^{-3}$

(1) The ranges refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied

30. When selenium compounds are used for colouring the glass, BAT is to reduce selenium emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the evaporation of selenium from the batch composition by selecting raw materials with a higher retention efficiency in the glass and reduced volatilisation	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of the raw materials
(ii) Applying a filtration system	The technique is generally applicable
(iii) Applying a dry or semi-dry scrubbing, in combination with a filtration system	

([1]) A description of the techniques is given in Section 1.10.5.

Table 20

BAT-AELs for selenium emissions from the melting furnace in the flat glass sector for the production of coloured glass

Parameter	BAT-AEL ([1]) ([2])	
	mg/Nm^3	kg/tonne melted glass ([3])
Selenium compounds, expressed as Se	1 – 3	$2,5 – 7,5 \times 10^{-3}$

([1]) The values refer to the sum of selenium present in the flue-gases in both solid and gaseous phases.
([2]) The lower levels correspond to conditions where the reduction of Se emissions is a priority over a lower production of solid waste from filter dust. In this case, a high stoichiometric ratio (reagent/pollutant) is applied and a significant solid waste stream is generated.
([3]) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.

1.3.6. Emissions from downstream processes

31. BAT is to reduce emissions to air from the downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the losses of coating products applied to the flat glass by ensuring a good sealing of the application system	The techniques are generally applicable
(ii) Minimising the losses of SO_2 from the annealing lehr, by operating the control system in an optimum manner	
(iii) Combining the SO_2 emissions from the lehr with the waste gas from the melting furnace, when technically feasible, and where a secondary treatment system is applied (filter and dry or semi-dry scrubber)	
(iv) Applying a secondary technique, e.g. wet scrubbing, or dry scrubbing and filtration	The techniques are generally applicable. The selection of the technique and its performance will depend on the inlet waste gas composition

([1]) A description of the secondary treatment systems is given in Sections 1.10.3 and 1.10.6.

Table 21

BAT-AELs for air emissions from downstream processes in the flat glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	< 15 – 20

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen chloride, expressed as HCl	< 10
Hydrogen fluoride, expressed as HF	< 1 – 5
SO_X, expressed as SO_2	< 200
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5

1.4. *BAT conclusions for continuous filament glass fibre manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all continuous filament glass fibre manufacturing installations.

1.4.1. Dust emissions from melting furnaces

The BAT-AELs reported in this section for dust refer to all materials that are solid at the point of measurement, including solid boron compounds. Gaseous boron compounds at the point of measurement are not included.

32. BAT is to reduce dust emissions from the waste gases of the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Reduction of the volatile components by raw material modifications The formulation of batch compositions without boron compounds or with low levels of boron is a primary measure for reducing dust emissions which are mainly generated by volatilisation phenomena. Boron is the main constituent of particulate matter emitted from the melting furnace	The application of the technique is limited by proprietary issues, since the boron-free or low-boron batch formulations are covered by a patent
(ii) Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable. The maximum environmental benefits are achieved for applications on new plants where the positioning and characteristics of the filter may be decided without restrictions
(iii) Wet scrubbing system	The application to existing plants may be limited by technical constraints; i.e. need for a specific waste water treatment plant

([1]) A description of the secondary treatment systems is given in Sections 1.10.1 and 1.10.7.

Table 22

BAT-AELs for dust emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT-AEL ([1])	
	mg/Nm^3	kg/tonne melted glass ([2])
Dust	< 10 – 20	< 0,045 – 0,09

([1]) Values at levels of < 30 mg/Nm^3 (< 0,14 kg/tonne melted glass) have been reported for boron-free formulations, with the application of primary techniques.
([2]) The conversion factor reported in Table 2 ($4{,}5 \times 10^{-3}$) has been applied.

1.4.2. Nitrogen oxides (NO_X) from melting furnaces

33. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable to air/fuel conventional furnaces within the constraints of the furnace energy efficiency and higher fuel demand. Most furnaces are already of the recuperative type.
(c) Staged combustion: (d) Air staging (e) Fuel staging	Fuel staging is applicable to most air/fuel, oxy-fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

Table 23

BAT-AELs for NO_X emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass
NO_X expressed as NO_2	Combustion modifications	< 600 – 1 000	< 2,7 – 4,5 [1]
	Oxy-fuel melting [2]	Not applicable	< 0,5 – 1,5

[1] The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.
[2] The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

1.4.3. Sulphur oxides (SO_X) from melting furnaces

34. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The technique is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust), which needs to be disposed of

Technique (1)	Applicability
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable. The presence of high concentrations of boron compounds in the flue-gases may limit the abatement efficiency of the reagent used in the dry or semi-dry scrubbing systems
(iv) Use of wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant

(1) A description of the techniques is given in Sections 1.10.3 and 1.10.6.

Table 24

BAT-AELs for SO_X emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	Fuel	BAT-AEL (1)	
		mg/Nm^3	kg/tonne melted glass (2)
SO_x expressed as SO_2	Natural gas (3)	< 200 – 800	< 0,9 – 3,6
	Fuel oil (4) (5)	< 500 – 1 000	< 2,25 – 4,5

(1) The higher levels of the range are associated with the use of sulphates in the batch formulation for refining the glass.
(2) The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.
(3) For oxy-fuel furnaces with the application of wet scrubbing, the BAT-AEL is reported to be < 0,1 kg/tonne melted glass of SO_X, expressed as SO_2.
(4) The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.
(5) The lower levels correspond to conditions where the reduction of SO_X is a priority over a lower production of solid waste corresponding to the sulphate-rich filter dust. In this case, the lower levels are associated with the use of a bag filter.

1.4.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

35. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable within the constraints of the batch formulation and the availability of raw materials
(ii) Minimisation of the fluorine content in the batch formulation The minimisation of fluorine emissions from the melting process may be achieved as follows: — minimising/reducing the quantity of fluorine compounds (e.g. fluorspar) used in the batch formulation to the minimum commensurate with the quality of the final product. Fluorine compounds are used to optimise the melting process, help fiberisation and minimise filament breakage — substituting fluorine compounds with alternative materials (e.g. sulphates)	The substitution of fluorine compounds with alternative materials is limited by quality requirements of the product
(iii) dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iv) wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant.

(1) A description of the techniques is given in Sections 1.10.4 and 1.10.6.

Table 25

BAT-AELs for HCl and HF emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl	< 10	< 0,05
Hydrogen fluoride, expressed as HF (2)	< 5 – 15	< 0,02 – 0,07

(1) The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.
(2) The higher levels of the range are associated with the use of fluorine compounds in the batch formulation.

1.4.5. Metals from melting furnaces

36. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The technique is generally applicable within the constraints of the availability of raw materials
(ii) Applying a dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iii) Applying wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant.

(1) A description of the techniques is given in Sections 1.10.5 and 1.10.6.

Table 26

BAT-AELs for metal emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1	$< 0,9 – 4,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 3	$< 4,5 – 13,5 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.

1.4.6. Emissions from downstream processes

37. BAT is to reduce emissions from downstream processes by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Wet scrubbing systems	The techniques are generally applicable for the treatment of waste gases from the forming process (application of the coating to the fibres) or secondary processes which involve the use of binder that must be cured or dried
(ii) Wet electrostatic precipitator	
(iii) Filtration system (bag filter)	The technique is generally applicable for the treatment of waste gases from cutting and milling operations of the products

(1) A description of the techniques is given in Sections 1.10.7 and 1.10.8.

Table 27

BAT-AELs for air emissions from downstream processes in the continuous filament glass fibre sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Emissions from forming and coating	
Dust	< 5 – 20
Formaldehyde	< 10
Ammonia	< 30
Total volatile organic compounds, expressed as C	< 20
Emissions from cutting and milling	
Dust	< 5 – 20

1.5. *BAT conclusions for domestic glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all domestic glass manufacturing installations.

1.5.1. Dust emissions from melting furnaces

38. BAT is to reduce dust emissions from the waste gases of the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Reduction of the volatile components by raw material modifications. The formulation of the batch composition may contain very volatile components (e.g. boron, fluorides) which significantly contribute to the formation of dust emissions from the melting furnace	The technique is generally applicable within the constraints of the type of glass produced and the availability of substitute raw materials
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations The implementation requires a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications made at the time of a complete furnace rebuild
(iv) Filtration system: electrostatic precipitator or bag filter	The techniques are generally applicable
(v) Wet scrubbing system	The applicability is limited to specific cases, in particular to electric melting furnaces, where flue-gas volumes and dust emissions are generally low and related to carryover of the batch formulation

([1]) A description of the techniques is given in Sections 1.10.5 and 1.10.7.

Table 28

BAT-AELs for dust emissions from the melting furnace in the domestic glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Dust	< 10 – 20 (2)	< 0,03 – 0,06
	< 1 – 10 (3)	< 0,003 – 0,03

(1) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case by case conversion factor may have to be applied for specific productions.
(2) Considerations concerning the economic viability for achieving the BAT-AELs in the case of furnaces with a capacity of < 80 t/d, producing soda-lime glass, are reported.
(3) This BAT-AEL applies to batch formulations containing significant amounts of constituents meeting the criteria as dangerous substances, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council.

1.5.2. Nitrogen oxides (NO_X) from melting furnaces

39. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: (f) Air staging (g) Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Special furnace design	The applicability is limited to batch formulations that contain high levels of external cullet (> 70 %). The application requires a complete rebuild of the melting furnace. The shape of the furnace (long and narrow) may pose space restrictions

Technique (1)	Applicability
(iii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iv) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

(1) A description of the techniques is given in Section 1.10.2.

Table 29

BAT-AELs for NO_X emissions from the melting furnace in the domestic glass sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_x expressed as NO_2	Combustion modifications, special furnace designs	< 500 – 1 000	< 1,25 – 2,5
	Electric melting	< 100	< 0,3
	Oxy-fuel melting (2)	Not applicable	< 0,5 – 1,5

(1) A conversion factor of $2,5 \times 10^{-3}$ has been applied for combustion modifications and special furnace designs and a conversion factor of 3×10^{-3} has been applied for electric melting (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.
(2) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

40. When nitrates are used in the batch formulation, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with primary or secondary techniques.

The BAT-AELs are set out in Table 29.

If nitrates are used in the batch formulation for a limited number of short campaigns or for melting furnaces with a capacity < 100 t/day producing special types of soda-lime glasses (clear/ultra-clear glass or coloured glass using selenium) and other special glasses (i.e. borosilicate, glass ceramics, opal glass, crystal and lead crystal), the BAT-AELs are set out in Table 30.

Technique (1)	Applicability
Primary techniques:	
— Minimising the use of nitrates in the batch formulation The use of nitrates is applied for very high quality products, where a very colourless (clear) glass is required or special glasses are produced. Effective alternative materials are sulphates, arsenic oxides, cerium oxide	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

(1) A description of the technique is given in Section 1.10.2.

Table 30

BAT-AELs for NO_X emissions from the melting furnace in the domestic glass sector, when nitrates are used in the batch formulation for a limited number of short campaigns or for melting furnaces with a capacity < 100 t/day producing special types of soda-lime glasses (clear/ultra-clear glass or coloured glass using selenium) and other special glasses (i.e. borosilicate, glass ceramics, opal glass, crystal and lead crystal

Parameter	Type of furnace	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass
NO_X expressed as NO_2	Fuel/air conventional furnaces	< 500 – 1 500	< 1,25 – 3,75 ([1])
	Electric melting	< 300 – 500	< 8 – 10

([1]) The conversion factor reported in Table 2 for soda-lime glass ($2,5 \times 10^{-3}$) has been applied.

1.5.3. Sulphur oxides (SO_X) from melting furnaces

41. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of the sulphur content in the batch formulation is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust)
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

([1]) A description of the techniques is given in Section 1.10.3.

Table 31

BAT-AELs for SO_X emissions from the melting furnace in the domestic glass sector

Parameter	Fuel/melting technique	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass ([1])
SO_x expressed as SO_2	Natural gas	< 200 – 300	< 0,5 – 0,75
	Fuel oil ([2])	< 1 000	< 2,5
	Electric melting	< 100	< 0,25

([1]) A conversion factor of $2,5 \times 10^{-3}$ has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.
([2]) The levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.

1.5.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

42. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the batch formulation for the type of glass produced at the installation and the availability of raw materials

Technique (1)	Applicability
(ii) Minimisation of the fluorine content in the batch formulation and optimisation of the fluorine mass balance The minimisation of fluorine emissions from the melting process may be achieved by minimising/reducing the quantity of fluorine compounds (e.g. fluorspar) used in the batch formulation to the minimum commensurate with the quality of the final product. Fluorine compounds are added to the batch formulation to give an opaque or cloudy appearance to the glass	The technique is generally applicable within the constraints of the quality requirements for the final product
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iv) Wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant. High costs, waste water treatment aspects, including restrictions in the recycle of sludge or solid residues from the water treatment, may limit the applicability of this technique

(1) A description of the techniques is given in Sections 1.10.4 and 1.10.6.

Table 32

BAT-AELs for HCl and HF emissions from the melting furnace in the domestic glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2) (3)	< 10 – 20	< 0,03 – 0,06
Hydrogen fluoride, expressed as HF (4)	< 1 – 5	< 0,003 – 0,015

(1) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.
(2) The lower levels are associated with the use of electric melting.
(3) In cases where KCl or NaCl are used as a refining agents, the BAT-AEL is < 30 mg/Nm^3 or < 0,09 kg/tonne melted glass.
(4) The lower levels are associated with the use of electric melting. The higher levels are associated with the production of opal glass, the recycling of filter dust or where high levels of external cullet are used in the batch formulation.

1.5.5. Metals from melting furnaces

43. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of raw materials
(ii) Minimising the use of metal compounds in the batch formulation, through a suitable selection of the raw materials where colouring and decolourising of glass is needed or where specific characteristics are conferred to the glass	For the production of crystal and lead crystal glasses the minimisation of metal compounds in the batch formulation is restricted by the limits defined in Directive 69/493/EEC which classifies the chemical composition of the final glass products.
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.5.

Table 33

BAT-AELs for metal emissions from the melting furnace in the domestic glass sector with the exception of glasses where selenium is used for decolourising

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1	$< 0,6 – 3 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	$< 3 – 15 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.

44. When selenium compounds are used for decolourising the glass, BAT is to reduce selenium emissions from the melting furnace by using one or a combination of the following techniques

Technique (1)	Applicability
(i) Minimising the use of selenium compounds in the batch formulation, through a suitable selection of the raw materials	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.5.

Table 34

BAT-AELs for selenium emissions from the melting furnace in the domestic glass sector when selenium compounds are used for decolourising the glass

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Selenium compounds, as Se	< 1	$< 3 \times 10^{-3}$

(1) The values refer to the sum of selenium present in the flue-gases in both solid and gaseous phases.
(2) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.

45. When lead compounds are used for the manufacturing of lead crystal glass, BAT is to reduce lead emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(ii) Bag filter	The technique is generally applicable
(iii) Electrostatic precipitator	
(iv) Dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the technique is given in Sections 1.10.1 and 1.10.5.

Table 35

BAT-AELs for lead emissions from the melting furnace in the domestic glass sector when lead compounds are used for manufacturing lead crystal glass

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Lead compounds, expressed as Pb	< 0,5 – 1	$< 1 - 3 \times 10^{-3}$

(1) The values refer to the sum of lead present in the flue-gases in both solid and gaseous phases.
(2) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.

1.5.6. Emissions from downstream processes

46. For downstream dusty processes, BAT is to reduce emissions of dust and metals by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Performing dusty operations (e.g. cutting, grinding, polishing) under liquid	The techniques are generally applicable
(ii) Applying a bag filter system	

(1) A description of the techniques is given in Section 1.10.8.

Table 36

BAT-AELs for air emissions from dusty downstream processes in the domestic glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	< 1 – 10
Σ (As, Co, Ni, Cd, Se, Cr_{VI}) (1)	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn) (1)	< 1 – 5
Lead compounds, expressed as Pb (2)	< 1 – 1,5

(1) The levels refer to the sum of metals present in the waste gas.
(2) The levels refer to downstream operations on lead crystal glass.

47. For acid polishing processes, BAT is to reduce HF emissions by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimising the losses of polishing product by ensuring a good sealing of the application system	The techniques are generally applicable
(ii) Applying a secondary technique, e.g. wet scrubbing.	

(1) A description of the techniques is given in Section 1.10.6.

Table 37

BAT-AELs for HF emissions from acid polishing processes in the domestic glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen fluoride, expressed as HF	< 5

1.6. *BAT conclusions for special glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all special glass manufacturing installations.

1.6.1. Dust emissions from melting furnaces

48. BAT is to reduce dust emissions from the waste gases of the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Reduction of the volatile components by raw material modifications The formulation of the batch composition may contain very volatile components (e.g. boron, fluorides) which represent the main constituents of dust emitted from the melting furnace	The technique is generally applicable within the constraints of the quality of the glass produced
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day) Not applicable for productions requiring large pull variations The implementation requires a complete furnace rebuild
(iii) Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable

([1]) A description of the techniques is given in Section 1.10.1.

Table 38

BAT-AELs for dust emissions from the melting furnace in the special glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Dust	< 10 – 20	< 0,03 – 0,13
	< 1 – 10 ([2])	< 0,003 – 0,065

([1]) The conversions factors of 2,5 × 10^{-3} and 6,5 × 10^{-3} have been used for the determination of the lower and upper value of the BAT-AELs range (see Table 2), with some values being approximated. However, a-case-by-case conversion factor needs to be applied, depending on the type of glass produced (see Table 2).

([2]) The BAT-AELs apply to batch formulations containing significant amounts of constituents meeting the criteria as dangerous substances, in accordance with Regulation (EC) No 1272/2008.

1.6.2. Nitrogen oxides (NO_X) from melting furnaces

49. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

I. primary techniques, such as:

Technique ([1])	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to the technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

([1]) A description of the techniques is given in Section 1.10.2.

II. secondary techniques, such as:

Technique ([1])	Applicability
(i) Selective catalytic reduction (SCR)	The application may require an upgrade of the dust abatement system in order to guarantee a dust concentration of below 10 – 15 mg/Nm^3 and a desulphurisation system for the removal of SO_X emissions Due to the optimum operating temperature window, the applicability is limited to the use of electrostatic precipitators. In general, the technique is not used with a bag filter system because the low operating temperature, in the range of 180 – 200 °C, would require reheating of the waste gases. The implementation of the technique may require significant space availability

Technique (1)	Applicability
(ii) Selective non-catalytic reduction (SNCR)	Very limited applicability to conventional regenerative furnaces, where the correct temperature window is difficult to access or does not allow a good mixing of the flue-gases with the reagent It may be applicable to new regenerative furnaces equipped with split regenerators; however, the temperature window is difficult to maintain due to the reversal of fire between the chambers that causes a cyclical temperature change

(1) A description of the techniques is given in Section 1.10.2.

Table 39

BAT-AELs for NO_X emissions from the melting furnace in the special glass sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Combustion modifications	600 – 800	1,5 – 3,2
	Electric melting	< 100	< 0,25 – 0,4
	Oxy-fuel melting (2) (3)	Not applicable	< 1 – 3
	Secondary techniques	< 500	< 1 – 3

(1) The conversion factors of 2,5 × 10^{-3} and 4 × 10^{-3} have been used for the determination of the lower and upper value of the BAT-AEL range (see Table 2), with some values being approximated. However, a case-by-case conversion factor needs to be applied based on the type of production (see Table 2).
(2) The higher values are related to a special production of borosilicate glass tubes for pharmaceutical use.
(3) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

50. When nitrates are used in the batch formulation, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with either primary or secondary techniques

Technique (1)	Applicability
Primary techniques — minimising the use of nitrates in the batch formulation The use of nitrates is applied for very high quality products, where special characteristics of the glass are required. Effective alternative materials are sulphates, arsenic oxides, cerium oxide	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

(1) A description of the technique is given in Section 1.10.2.

Table 40

BAT-AELs for NO_X emissions from the melting furnace in the special glass sector when nitrates are used in the batch formulation

Parameter	BAT	BAT-AEL (1)	
		mg/Nm^3	kg/tonne melted glass (2)
NO_X expressed as NO_2	Minimisation of nitrate input in the batch formulation combined with primary or secondary techniques	< 500 – 1 000	< 1 – 6

(1) The lower levels are associated with the use of electric melting.
(2) The conversion factors of 2,5 × 10^{-3} and 6,5 × 10^{-3} have been used for the determination of the lower and upper value of the BAT-AEL range respectively, with values being approximated. A case-by-case conversion factor may have to be applied based on the type of production (see Table 2).

1.6.3. Sulphur oxides (SO_X) from melting furnaces

51. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The technique is generally applicable within the constraints of quality requirements of the final glass product
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

[1] A description of the techniques is given in Section 1.10.3.

Table 41

BAT-AELs for SO_X emissions from the melting furnace in the special glass sector

Parameter	Fuel/melting technique	BAT-AEL [1]	
		mg/Nm^3	kg/tonne melted glass [2]
SO_X expressed as SO_2	Natural gas, electric melting [3]	< 30 – 200	< 0,08 – 0,5
	Fuel oil [4]	500 – 800	1,25 – 2

[1] The ranges take into account the variable sulphur balances associated with the type of glass produced.
[2] The conversion factor of $2,5 \times 10^{-3}$ (see Table 2) has been used. However, a case-by-case conversion factor may have to be applied based on the type of production.
[3] The lower levels are associated with the use of electric melting and batch formulations without sulphates.
[4] The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.

1.6.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

52. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the batch formulation for the type of glass produced at the installation and the availability of raw materials
(ii) Minimisation of the fluorine and/or chlorine compounds in the batch formulation and optimisation of the fluorine and/or chlorine mass balance Fluorine compounds are used to confer particular characteristics to special glasses (i.e. opaque lighting glass, optical glass). Chlorine compounds may be used as fining agents for borosilicate glass production	The technique is generally applicable within the constraints of the quality requirements for the final product.
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

[1] A description of the techniques is given in Section 1.10.4.

Table 42

BAT-AELs for HCl and HF emissions from the melting furnace in the special glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2)	< 10 – 20	< 0,03 – 0,05
Hydrogen fluoride, expressed as HF	< 1 – 5	< 0,003 – 0,04 (3)

(1) The conversion factor of 2,5 × 10^{-3} (see Table 2) has been used; with some values being approximated. A case-by-case conversion factor may have to be applied based on the type of production.
(2) The higher levels are associated with the use of materials containing chlorine in the batch formulation.
(3) The upper value of the range has been derived from specific reported data.

1.6.5. Metals from melting furnaces

53. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of raw materials
(ii) Minimising the use of metal compounds in the batch formulation, through a suitable selection of the raw materials where colouring and decolourising of glass is needed or where specific characteristics are conferred to the glass	The techniques are generally applicable
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 43

BAT-AELs for metal emissions from the melting furnace in the special glass sector

Parameter	BAT-AEL (1) (2)	
	mg/Nm^3	kg/tonne melted glass (3)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,1 – 1	< 0,3 – 3 × 10^{-3}
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	< 3 – 15 × 10^{-3}

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The lower levels are BAT-AELs when metal compounds are not intentionally used in the batch formulation.
(3) The conversion factor of 2,5 × 10^{-3} (see Table 2) has been used, with some values indicated in the table having been approximated. A case-by-case conversion factor may have to be applied based on the type of production.

1.6.6. Emissions from downstream processes

54. For downstream dusty processes, BAT is to reduce emissions of dust and metals by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Performing dusty operations (e.g. cutting, grinding, polishing) under liquid	The techniques are generally applicable
(ii) Applying a bag filter system	

(1) A description of the techniques is given in Section 1.10.8.

Table 44

BAT-AELs for dust and metal emissions from downstream processes in the special glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	1 – 10
Σ (As, Co, Ni, Cd, Se, Cr_{VI}) (1)	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn) (1)	< 1 – 5

(1) The levels refer to the sum of metals present in the waste gas.

55. For acid polishing processes, BAT is to reduce HF emissions by using one or a combination of the following techniques:

Technique (1)	Description
(i) Minimising the losses of polishing product by ensuring a good sealing of the application system	The techniques are generally applicable
(ii) Applying a secondary technique, e.g. wet scrubbing	

(1) A description of the techniques is given in Section 1.10.6.

Table 45

BAT-AELs for HF emissions from acid polishing processes in the special glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen fluoride, expressed as HF	< 5

1.7. *BAT conclusions for mineral wool manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all mineral wool manufacturing installations.

1.7.1. Dust emissions from melting furnaces

56. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying an electrostatic precipitator or a bag filter system

Technique (1)	Applicability
Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable. Electrostatic precipitators are not applicable to cupola furnaces for stone wool production, due to the risk of explosion from the ignition of carbon monoxide produced within the furnace

(1) A description of the techniques is given in Section 1.10.1.

Table 46

BAT-AELs for dust emissions from the melting furnace in the mineral wool sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Dust	< 10 – 20	< 0,02 – 0,050

(1) The conversion factors of 2×10^{-3} and $2{,}5 \times 10^{-3}$ have been used for the determination of the lower and upper value of the BAT-AELs range (see Table 2), in order to cover both the production of glass wool and stone wool.

1.7.2. Nitrogen oxides (NO_X) from melting furnaces

57. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to the technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

Table 47

BAT-AELs for NO_X emissions from the melting furnace in the mineral wool sector

Parameter	Product	Melting technique	BAT-AEL	
			mg/Nm^3	kg/tonne melted glass [1]
NO_X expressed as NO_2	Glass wool	Fuel/air and electric furnaces	< 200 – 500	< 0,4 – 1,0
		Oxy-fuel melting [2]	Not applicable	< 0,5
	Stone wool	All types of furnaces	< 400 – 500	< 1,0 – 1,25

[1] The conversion factors of 2×10^{-3} for glass wool and $2,5 \times 10^{-3}$ for stone wool have been used (see Table 2).
[2] The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

58. When nitrates are used in the batch formulation for glass wool production, BAT is to reduce NO_X emissions by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimising the use of nitrates in the batch formulation The use of nitrates is applied as an oxidising agent in batch formulations with high levels of external cullet to compensate for the presence of organic material contained in the cullet	The technique is generally applicable within the constraints of the quality requirements for the final product
(ii) Electric melting	The technique is generally applicable. The implementation of electric melting requires a complete furnace rebuild
(iii) Oxy-fuel melting	The technique is generally applicable. The maximum environmental benefits are achieved for applications made at the time of a complete furnace rebuild

(1) A description of the techniques is given in Section 1.10.2.

Table 48

BAT-AELs for NO_X emissions from the melting furnace in glass wool production when nitrates are used in the batch formulation

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Minimisation of nitrate input in the batch formulation, combined with primary techniques	< 500 – 700	< 1,0 – 1,4 (2)

(1) The conversion factor of 2×10^{-3} has been used (see Table 2).
(2) The lower levels of the ranges are associated with the application of oxy-fuel melting.

1.7.3. Sulphur oxides (SO_X) from melting furnaces

59. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	In glass wool production, the technique is generally applicable within the constraints of the availability of low-sulphur raw materials, in particular external cullet. High levels of external cullet in the batch formulation limit the possibility of optimising the sulphur balance due to a variable sulphur content. In the stone wool production, the optimisation of the sulphur balance may require a trade-off approach between the removal of SO_X emissions from the flue-gases and the management of the solid waste, deriving from the treatment of the flue-gases (filter dust) and/or from the fiberising process, which may be recycled into the batch formulation (cement briquettes) or may need to be disposed of
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	Electrostatic precipitators are not applicable to cupola furnaces for stone wool production (see BAT 56)
(iv) Use of wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant

(1) A description of the techniques is given in Sections 1.10.3 and 1.10.6.

Table 49

BAT-AELs for SO_X emissions from the melting furnace in the mineral wool sector

Parameter	Product/conditions	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
SO_X expressed as SO_2	***Glass wool***		
	Gas-fired and electric furnaces (2)	< 50 – 150	< 0,1 – 0,3
	Stone wool		
	Gas-fired and electric furnaces	< 350	< 0,9
	Cupola furnaces, no briquettes or slag recycling (3)	< 400	< 1,0
	Cupola furnaces, with cement briquettes or slag recycling (4)	< 1 400	< 3,5

(1) The conversion factors of 2×10^{-3} for glass wool and $2,5 \times 10^{-3}$ for stone wool have been used (see Table 2).
(2) The lower levels of the ranges are associated with the use of electric melting. The higher levels are associated with high levels of cullet recycling.
(3) The BAT-AEL is associated with conditions where the reduction of SO_X emissions has a high priority over a lower production of solid waste.
(4) When reduction of waste has a high priority over SO_X emissions, higher emission values may be expected. The achievable levels should be based on a sulphur balance.

1.7.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

60. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Description
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable within the constraints of the batch formulation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	Electrostatic precipitators are not applicable to cupola furnaces for stone wool production (see BAT 56)

(1) A description of the techniques is given in Section 1.10.4.

Table 50

BAT-AELs for HCl and HF emissions from the melting furnace in the mineral wool sector

Parameter	Product	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl	Glass wool	< 5 – 10	< 0,01 – 0,02
	Stone wool	< 10 – 30	< 0,025 – 0,075
Hydrogen fluoride, expressed as HF	All products	< 1 – 5	< 0,002 – 0,013 (2)

(1) The conversion factors of 2×10^{-3} for glass wool and $2,5 \times 10^{-3}$ for stone wool have been used (see Table 2).
(2) The conversion factors of 2×10^{-3} and $2,5 \times 10^{-3}$ have been used for the determination of the lower and upper values of the BAT-AELs range (see Table 2).

1.7.5. Hydrogen sulphide (H_2S) from stone wool melting furnaces

61. BAT is to reduce H_2S emissions from the melting furnace by applying a waste gas incineration system to oxidise hydrogen sulphide to SO_2

Technique (1)	Applicability
Waste gas incinerator system	The technique is generally applicable to stone wool cupola furnaces

(1) A description of the technique is given in Section 1.10.9.

Table 51

BAT-AELs for H_2S emissions from the melting furnace in stone wool production

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen sulphide, expressed as H_2S	< 2	< 0,005

(1) The conversion factor of $2,5 \times 10^{-3}$ for stone wool has been applied (see Table 2).

1.7.6. Metals from melting furnaces

62. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The technique is generally applicable within the constraints of the availability of raw materials. In glass wool production, the use of manganese in the batch formulation as an oxidising agent depends on the quantity and quality of external cullet employed in the batch formulation and may be minimised accordingly
(ii) Application of a filtration system	Electrostatic precipitators are not applicable to cupola furnaces for stone wool production (see BAT 56)

(1) A description of the techniques is given in Section 1.10.5.

Table 52

BAT-AELs for metal emissions from the melting furnace in the mineral wool sector

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1 (3)	$< 0,4 – 2,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 2 (3)	$< 2 – 5 \times 10^{-3}$

(1) The ranges refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factors of 2×10^{-3} and $2,5 \times 10^{-3}$ have been used for the determination of the lower and upper values of the BAT-AELs range (see Table 2).
(3) Higher values are associated with the use of cupola furnaces for the production of stone wool.

1.7.7. Emissions from downstream processes

63. BAT is to reduce emissions from downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Impact jets and cyclones The technique is based on the removal of particles and droplets from waste gases by impaction/impingement, as well as gaseous substances by partial absorption with water. Process water is normally used for impact jets. The recycling process water is filtered before it is reapplied	The technique is generally applicable to the mineral wool sector, in particular to glass wool processes for the treatment of emissions from the forming area (application of the coating to the fibres). Limited applicability to stone wool processes since it could adversely affect other abatement techniques being used.
(ii) Wet scrubbers	The technique is generally applicable for the treatment of waste gases from the forming process (application of the coating to the fibres) or for combined waste gases (forming plus curing)
(iii) Wet electrostatic precipitators	The technique is generally applicable for the treatment of waste gases from the forming process (application of the coating to the fibres), from curing ovens or for combined waste gases (forming plus curing)
(iv) Stone wool filters It consists of a steel or concrete structure in which stone wool slabs are mounted and act as a filter medium. The filtering medium needs to be cleaned or exchanged periodically. This filter is suitable for waste gases with a high moisture content and particulate matter with an adhesive nature	The applicability is mainly limited to stone wool processes for waste gases from the forming area and/or curing ovens
(v) Waste gas incineration	The technique is generally applicable for the treatment of waste gases from curing ovens, in particular in the stone wool processes. The application to combined waste gases (forming plus curing) is not economically viable because of the high volume, low concentration, low temperature of the waste gases

([1]) A description of the techniques is given in Sections 1.10.7 and 1.10.9.

Table 53

BAT-AELs for air emissions from downstream processes in the mineral wool sector, when treated separately

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne finished product
Forming area – Combined forming and curing emissions-Combined forming, curing and cooling emissions		
Total particulate matter	< 20 – 50	—
Phenol	< 5 – 10	—
Formaldehyde	< 2 – 5	—
Ammonia	30 – 60	—

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne finished product
Amines	< 3	—
Total volatile organic compounds expressed as C	10 – 30	—
Curing oven emissions (1) (2)		
Total particulate matter	< 5 – 30	< 0,2
Phenol	< 2 – 5	< 0,03
Formaldehyde	< 2 – 5	< 0,03
Ammonia	< 20 – 60	< 0,4
Amines	< 2	< 0,01
Total volatile organic compounds expressed as C	< 10	< 0,065
NO_X, expressed as NO_2	< 100 – 200	< 1

(1) Emission levels expressed in kg/tonne of finished product are not affected by the thickness of the mineral wool mat produced nor by extreme concentration or dilution of the flue-gases. A conversion factor of $6,5 \times 10^{-3}$ has been used.
(2) If high density or high binder content mineral wools are produced, the emission levels associated with the techniques listed as BAT for the sector could be significantly higher than these BAT-AELs. If these types of products represent the majority of the production from a given installation, then consideration should be given to other techniques.

1.8. *BAT conclusions for high temperature insulation wools (HTIW) manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all HTIW manufacturing installations.

1.8.1. Dust emissions from melting and downstream processes

64. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying a filtration system.

Technique (1)	Applicability
The filtration system usually consists of a bag filter	The technique is generally applicable

(1) A description of the technique is given in Section 1.10.1.

Table 54

BAT-AELs for dust emissions from the melting furnace in the HTIW sector

Parameter	BAT	BAT-AEL
		mg/Nm^3
Dust	Flue-gas cleaning by filtration systems	< 5 – 20 (1)

(1) The values are associated with the use of a bag filter system.

65. For downstream dusty processes, BAT is to reduce emissions using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the losses of product by ensuring a good sealing of the production line, where technically applicable. The potential sources of dust and fibre emissions are: — fiberisation and collection — mat formation (needling) — lubricant burn-off — cutting, trimming and packaging of the finished product A good construction, sealing and maintenance of the downstream processing systems are essential for minimising the losses of product into the air	The techniques are generally applicable
(ii) Cutting, trimming and packaging under vacuum, by applying an efficient extraction system in conjunction with a fabric filter. A negative pressure is applied to the workstation (i.e. cutting machine, cardboard box for packaging) in order to extract particulate and fibrous releases and convey it to a fabric filter	
(iii) Applying a fabric filter system ([1]) Waste gases from downstream operations (e.g. fiberising, mat formation, lubricant burn-off) are conveyed to a treatment system consisting of a bag filter	

([1]) A description of the technique is given in Section 1.10.1.

Table 55

BAT-AELs from dusty downstream processes in the HTIW sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust ([1])	1 – 5

([1]) The lower level of the range is associated with emissions of aluminium silicate glass wool/refractory ceramic fibres (ASW/RCF).

1.8.2. Nitrogen oxides (NO_X) from melting and downstream processes

66. BAT is to reduce NO_X emissions from the lubricant burn-off oven by applying combustion control and/or modifications

Technique	Applicability
Combustion control and/or modifications Techniques to reduce the formation of thermal NO_X emissions include a control of the main combustion parameters: — air/fuel ratio (oxygen content in the reaction zone) — flame temperature — residence time in the high temperature zone. A good combustion control consists of generating those conditions which are least favourable for NO_X formation	The technique is generally applicable

Table 56

BAT-AELs for NO_X from the lubricant burn-off oven in the HTIW sector

Parameter	BAT	BAT-AEL
		mg/Nm^3
NO_X expressed as NO_2	Combustion control and/or modifications	100 – 200

1.8.3. Sulphur oxides (SO_X) from melting and downstream processes

67. BAT is to reduce SO_X emissions from the melting furnaces and downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of sulphur	The technique is generally applicable within the constraints of the availability of raw materials
(ii) Use of low sulphur content fuel	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

([1]) A description of the technique is given in Section 1.10.3.

Table 57

BAT-AELs for SO_X emissions from the melting furnaces and downstream processes in the HTIW sector

Parameter	BAT	BAT-AEL
		mg/Nm^3
SO_x expressed as SO_2	Primary techniques	< 50

1.8.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

68. BAT is to reduce HCl and HF emissions from the melting furnace by selecting raw materials for the batch formulation with a low content of chlorine and fluorine

Technique ([1])	Applicability
Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable

([1]) A description of the technique is given in Section 1.10.4.

Table 58

BAT-AELs for HCl and HF emissions from the melting furnace in the HTIW sector

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen chloride, expressed as HCl	< 10
Hydrogen fluoride, expressed as HF	< 5

1.8.5. Metals from melting furnaces and downstream processes

69. BAT is to reduce metal emissions from the melting furnace and/or downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The techniques are generally applicable
(ii) Applying a filtration system	

([1]) A description of the technique is given in Section 1.10.5.

Table 59

BAT-AELs for metal emissions from the melting furnace and/or downstream processes in the HTIW sector

Parameter	BAT-AEL ([1])
	mg/Nm^3
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5

([1]) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.

1.8.6. Volatile organic compounds from downstream processes

70. BAT is to reduce volatile organic compound (VOC) emissions from the lubricant burn-off oven by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Combustion control, including monitoring the associated emissions of CO. The technique consists of the control of combustion parameters (e.g. oxygen content in the reaction zone, flame temperature) in order to ensure a complete combustion of the organic components (i.e. poly-ethylene glycol) in the waste gas. The monitoring of carbon monoxide emissions allows for controlling the presence of uncombusted organic materials	The technique is generally applicable
(ii) Waste gas incineration	The economic viability may limit the applicability of these techniques because of low waste gas volumes and VOC concentrations
(iii) Wet scrubbers	

([1]) A description of the techniques is given in Sections 1.10.6 and 1.10.9.

Table 60

BAT-AELs for VOC emissions from the lubricant burn-off oven in the HTIW sector, when treated separately

Parameter	BAT	BAT-AEL
		mg/Nm^3
Volatile organic compounds expressed as C	Primary and/or secondary techniques	10 – 20

1.9. *BAT conclusions for frits manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all frits glass manufacturing installations.

1.9.1. Dust emissions from melting furnaces

71. BAT is to reduce dust emissions from the waste gases of the melting furnace by means of an electrostatic precipitator or a bag filter system.

Technique (1)	Applicability
Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable

(1) A description of the technique is given in Section 1.10.1.

Table 61

BAT-AELs for dust emissions from the melting furnace in the frits sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Dust	< 10 – 20	< 0,05 – 0,15

(1) The conversion factors of 5×10^{-3} and $7,5 \times 10^{-3}$ have been used for the determination of the lower and upper value of the BAT-AELs range (see Table 2). However, a case-by-case conversion factor may have to be applied based on the type of combustion.

1.9.2. Nitrogen oxides (NO_X) from melting furnaces

72. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimising the use of nitrates in the batch formulation In the frits production, nitrates are used in the batch formulation of many products in order to obtain the required characteristics	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials and/or the quality requirements of the final product
(ii) Reduction of the parasitic air entering the furnace The technique consists of preventing the ingress of air into the furnace by sealing the burner blocks, the batch material feeder and any other opening of the melting furnace	The technique is generally applicable
(iii) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity

Technique (1)	Applicability
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(iv) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

(1) A description of the technique is given in Section 1.10.2.

Table 62

BAT-AELs for NO_X emissions from the melting furnace in the frits glass sector

Parameter	BAT	Operating conditions	BAT-AEL (1)	
			mg/Nm^3	kg/tonne melted glass (2)
NO_X expressed as NO_2	Primary techniques	Oxy-fuel firing, without nitrates (3)	Not applicable	< 2,5 – 5
		Oxy-fuel firing, with use of nitrates	Not applicable	5 – 10
		Fuel/air, fuel/oxygen-enriched air combustion, without nitrates	500 – 1 000	2,5 – 7,5
		Fuel/air, fuel/oxygen-enriched air combustion, with use of nitrates	< 1 600	< 12

(1) The ranges take into account the combination of flue-gases from furnaces applying different melting techniques and producing a variety of frit types, with or without nitrates in the batch formulations, which may be conveyed to a single stack, precluding the possibility of characterising each applied melting technique and the different products.
(2) The conversion factors of 5×10^{-3} and $7,5 \times 10^{-3}$ have been used for the determination of the lower and higher values of the range. However, a case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).
(3) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

1.9.3. Sulphur oxides (SO_X) from melting furnaces

73. BAT is to control SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of sulphur	The technique is generally applicable within the constraints of the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

(1) A description of the techniques is given in Section 1.10.3.

Table 63

BAT-AELs for SO_X emissions from the melting furnace in the frits sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
SO_X, expressed as SO_2	< 50 – 200	< 0,25 – 1,5

([1]) The conversion factors of 5×10^{-3} and $7,5 \times 10^{-3}$ have been used; however, the values indicated in the table may have been approximated. A case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).

1.9.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

74. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable within the constraints of the batch formulation and the availability of raw materials
(ii) Minimisation of the fluorine compounds in the batch formulation when used to ensure the quality of the final product Fluorine compounds are used to confer particular characteristics to the frits (i.e. thermal and chemical resistance)	The minimisation or substitution of fluorine compounds with alternative materials is limited by quality requirements of the product
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

([1]) A description of the techniques is given in Section 1.10.4.

Table 64

BAT-AELs for HCl and HF emissions from the melting furnace in the frits sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Hydrogen chloride, expressed as HCl	< 10	< 0,05
Hydrogen fluoride, expressed as HF	< 5	< 0,03

([1]) The conversion factor of 5×10^{-3} has been used with some values being approximated. A case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).

1.9.5. Metals from melting furnaces

75. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The technique is generally applicable within the constraints of the type of frit produced at the installation and the availability of raw materials

Technique (1)	Applicability
(ii) Minimising of the use of metal compounds in the batch formulation, where colouring is required or other specific characteristics are conferred to the frit	The techniques are generally applicable
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 65

BAT-AELs for metal emissions from the melting furnace in the frits sector

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1	$< 7,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5	$< 37 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factor of $7,5 \times 10^{-3}$ has been used. A case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).

1.9.6. Emissions from downstream processes

76. For downstream dusty processes, BAT is to reduce emissions by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Applying wet milling techniques The technique consists of grinding the frit to the desired particle size distribution with sufficient liquid to form a slurry. The process is generally carried out in alumina ball mills with water	The techniques are generally applicable
(ii) Operating dry milling and dry product packaging under an efficient extraction system in conjunction with a fabric filter A negative pressure is applied to the milling equipment or to the work station where packaging is carried out in order to convey dust emissions to a fabric filter	
(iii) Applying a filtration system	

(1) A description of the techniques is given in Section 1.10.1.

Table 66

BAT-AELs for air emissions from downstream processes in the frits sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	5 – 10
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1 (1)
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5 (1)

(1) The levels refer to the sum of metals present in the waste gas.

Glossary

1.10. *Description of techniques*

1.10.1. Dust emissions

Technique	Description
Electrostatic precipitator	Electrostatic precipitators operate such that particles are charged and separated under the influence of an electrical field. Electrostatic precipitators are capable of operating over a wide range of conditions
Bag filter	Bag filters are constructed from porous woven or felted fabric through which gases are flowed to remove particles. The use of a bag filter requires a fabric material selection adequate to the characteristics of the waste gases and the maximum operating temperature
Reduction of the volatile components by raw material modifications	The formulation of batch compositions might contain very volatile components (e.g. boron compounds) which could be minimised or substituted for reducing dust emissions mainly generated by volatilisation phenomena
Electric melting	The technique consists of a melting furnace where the energy is provided by resistive heating. In the cold-top furnaces (where the electrodes are generally inserted at the bottom of the furnace) the batch blanket covers the surface of the melt with a consequent, significant reduction of the volatilisation of batch components (i.e. lead compounds)

1.10.2. NO_X emissions

Technique	Description
Combustion modifications	
(i) Reduction of air/fuel ratio	The technique is mainly based on the following features: — minimisation of air leakages into the furnace — careful control of air used for combustion — modified design of the furnace combustion chamber
(ii) Reduced combustion air temperature	The use of recuperative furnaces, in place of regenerative furnaces, results in a reduced air preheat temperature and, consequently, a lower flame temperature. However, this is associated with a lower furnace efficiency (lower specific pull), lower fuel efficiency and higher fuel demand, resulting in potentially higher emissions (kg/tonne of glass)
(iii) Staged combustion	— Air staging – involves substoichiometric firing and the addition of the remaining air or oxygen into the furnace to complete combustion. — Fuel staging – a low impulse primary flame is developed in the port neck (10 % of total energy); a secondary flame covers the root of the primary flame reducing its core temperature
(iv) Flue-gas recirculation	Implies the reinjection of waste gas from the furnace into the flame to reduce the oxygen content and therefore the temperature of the flame. The use of special burners is based on internal recirculation of combustion gases which cool the root of the flames and reduce the oxygen content in the hottest part of the flames
(v) Low-NO_X burners	The technique is based on the principles of reducing peak flame temperatures, delaying but completing the combustion and increasing the heat transfer (increased emissivity of the flame). It may be associated with a modified design of the furnace combustion chamber

Technique	Description
(vi) Fuel choice	In general, oil-fired furnaces show lower NO_X emissions than gas-fired furnaces due to better thermal emissivity and lower flame temperatures
Special furnace design	Recuperative type furnace that integrates various features, allowing for lower flame temperatures. The main features are: — specific type of burners (number and positioning) — modified geometry of the furnace (height and size) — two-stage raw material preheating with waste gases passing over the raw materials entering the furnace and an external cullet preheater downstream of the recuperator used for preheating the combustion air
Electric melting	The technique consists of a melting furnace where the energy is provided by resistive heating. The main features are: — electrodes are generally inserted at the bottom of the furnace (cold-top) — nitrates are often required in the batch composition of cold-top electric furnaces to provide the necessary oxidising conditions for a stable, safe and efficient manufacturing process
Oxy-fuel melting	The technique involves the replacement of the combustion air with oxygen (> 90 % purity), with consequent elimination/reduction of thermal NO_X formation from nitrogen entering the furnace. The residual nitrogen content in the furnace depends on the purity of the oxygen supplied, on the quality of the fuel (% N_2 in natural gas) and on the potential air inlet
Chemical reduction by fuel	The technique is based on the injection of fossil fuel to the waste gas with chemical reduction of NO_X to N_2 through a series of reactions. In the 3R process, the fuel (natural gas or oil) is injected at the regenerator entrance. The technology is designed for use in regenerative furnaces
Selective catalytic reduction (SCR)	The technique is based on the reduction of NO_X to nitrogen in a catalytic bed by reaction with ammonia (in general aqueous solution) at an optimum operating temperature of around 300 – 450 °C. One or two layers of catalyst may be applied. A higher NO_X reduction is achieved with the use of higher amounts of catalyst (two layers)
Selective non-catalytic reduction (SNCR)	The technique is based on the reduction of NO_X to nitrogen by reaction with ammonia or urea at a high temperature. The operating temperature window must be maintained between 900 and 1 050 °C
Minimising the use of nitrates in the batch formulation	The minimisation of nitrates is used to reduce NO_X emissions deriving from the decomposition of these raw materials when applied as an oxidising agent for very high quality products where a very colourless (clear) glass is required or for other glasses to provide the required characteristics. The following options may be applied: — Reduce the presence of nitrates in the batch formulation to the minimum commensurate with the product and melting requirements. — Substitute nitrates with alternative materials. Effective alternatives are sulphates, arsenic oxides, cerium oxide. — Apply process modifications (e.g. special oxidising combustion conditions)

1.10.3. SO_X emissions

Technique	Description
Dry or semi-dry scrubbing, in combination with a filtration system	Dry powder or a suspension/solution of alkaline reagent are introduced and dispersed in the waste gas stream. The material reacts with the sulphur gaseous species to form a solid which has to be removed by filtration (bag filter or electrostatic precipitator). In general, the use of a reaction tower improves the removal efficiency of the scrubbing system
Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of sulphur content in the batch formulation is applied to reduce SO_X emissions deriving from the decomposition of sulphur-containing raw materials (in general, sulphates) used as fining agents. The effective reduction of SO_X emissions depends on the retention of sulphur compounds in the glass, which may vary significantly depending on the glass type, and on the optimisation of the sulphur balance
Use of low sulphur content fuels	The use of natural gas or low sulphur fuel oil is applied to reduce the amount of SO_X emissions deriving from the oxidation of sulphur contained in the fuel during combustion

1.10.4. HCl, HF emissions

Technique	Description
Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique consists of a careful selection of raw materials that may contain chlorides and fluorides as impurities (e.g. synthetic soda ash, dolomite, external cullet, recycled filter dust) in order to reduce at source HCl and HF emissions which arise from the decomposition of these materials during the melting process
Minimisation of the fluorine and/or chlorine compounds in the batch formulation and optimisation of the fluorine and/or chlorine mass balance	The minimisation of fluorine and/or chlorine emissions from the melting process may be achieved by minimising/reducing the quantity of these substances used in the batch formulation to the minimum commensurate with the quality of the final product. Fluorine compounds (e.g. fluorspar, cryolite, fluorsilicate) are used to confer particular characteristics to special glasses (e.g. opaque glass, optical glass). Chlorine compounds may be used as fining agents
Dry or semi-dry scrubbing, in combination with a filtration system	Dry powder or a suspension/solution of alkaline reagent are introduced and dispersed in the waste gas stream. The material reacts with the gaseous chlorides and fluorides to form a solid which has to be removed by filtration (electrostatic precipitator or bag filter)

1.10.5. Metal emissions

Technique	Description
Selection of raw materials for the batch formulation with a low content of metals	The technique consists of a careful selection of batch materials that may contain metals as impurities (e.g. external cullet), in order to reduce at source metal emissions which arise from the decomposition of these materials during the melting process
Minimising the use of metal compounds in the batch formulation, where colouring and decolourising of glass is needed, subject to consumer glass quality requirements	The minimisation of metal emissions from the melting process may be achieved as follows: — minimising the quantity of metal compounds in the batch formulation (e.g. iron, chromium, cobalt, copper, manganese compounds) in the production of coloured glasses — minimising the quantity of selenium compounds and cerium oxide used as decolourising agents for the production of clear glass

Technique	Description
Minimising the use of selenium compounds in the batch formulation, through a suitable selection of the raw materials	The minimisation of selenium emissions from the melting process may be achieved by: — minimising/reducing the quantity of selenium in the batch formulation to the minimum commensurate with the product requirements — selecting selenium raw materials with a lower volatility, in order to reduce the volatilisation phenomena during the melting process
Application of a filtration system	Dust abatement systems (bag filter and electrostatic precipitator) can reduce both dust and metal emissions since the emissions to air of metals from glass melting processes are largely contained in particulate form. However, for some metals presenting extremely volatile compounds (e.g. selenium) the removal efficiency may vary significantly with the filtration temperature
Dry or semi-dry scrubbing, in combination with a filtration system	Gaseous metals can be substantially reduced by the use of a dry or semi-dry scrubbing technique with an alkaline reagent. The alkaline reagent reacts with the gaseous species to form a solid which has to be removed by filtration (bag filter or electrostatic precipitator)

1.10.6. Combined gaseous emissions (e.g. SO_X, HCl, HF, boron compounds)

Wet scrubbing	In the wet scrubbing process, gaseous compounds are dissolved in a suitable liquid (water or alkaline solution). Downstream of the wet scrubber, the flue-gases are saturated with water and a separation of the droplets is required before discharging the flue-gases. The resulting liquid has to be treated by a waste water process and the insoluble matter is collected by sedimentation or filtration

1.10.7. Combined emissions (solid + gaseous)

Technique	Description
Wet scrubbing	In a wet scrubbing process (by a suitable liquid: water or alkaline solution), the simultaneous removal of solid and gaseous compounds may be achieved. The design criteria for particulate or gas removal are different; therefore, the design is often a compromise between the two options. The resulting liquid has to be treated by a waste water process and the insoluble matter (solid emissions and products from chemical reactions) is collected by sedimentation or filtration. In the mineral wool and continuous filament glass fibre sector, the most common systems applied are: — packed bed scrubbers with impact jets upstream — venturi scrubbers
Wet electrostatic precipitator	The technique consists of an electrostatic precipitator in which the collected material is removed from the plates of the collectors by flushing with a suitable liquid, usually water. Some mechanism is usually installed to remove water droplets before discharge of the waste gas (demister or a last dry field)

1.10.8. Emissions from cutting, grinding, polishing operations

Technique	Description
Performing dusty operations (e.g. cutting, grinding, polishing) under liquid	Water is generally used as a coolant for cutting, grinding and polishing operations and for preventing dust emissions. An extraction system equipped with a mist eliminator may be necessary

Technique	Description
Applying a bag filter system	The use of bag filters is suitable for the reduction of both dust and metal emissions since metals from downstream processes are largely contained in particulate form
Minimising the losses of polishing product by ensuring a good sealing of the application system	Acid polishing is performed by immersion of the glass articles in a polishing bath of hydrofluoric and sulphuric acids. The release of fumes may be minimised by a good design and maintenance of the application system in order to minimise losses
Applying a secondary technique, e.g. wet scrubbing	Wet scrubbing with water is used for the treatment of waste gases, due to the acidic nature of the emissions and the high solubility of the gaseous pollutants to be removed

1.10.9. H_2S, VOC emissions

Waste gas incineration	The technique consists of an afterburner system which oxidises the hydrogen sulphide (generated by strong reducing conditions in the melting furnace) to sulphur dioxide and carbon monoxide to carbon dioxide. Volatile organic compounds are thermally incinerated with consequent oxidation to carbon dioxide, water and other combustion products (e.g. NO_X, SO_X)

COMMISSION IMPLEMENTING DECISION

of 28 February 2012

establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for iron and steel production

(notified under document C(2012) 903)

(Text with EEA relevance)

(2012/135/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [1], and in particular Article 13(5) thereof,

Whereas:

(1) Article 13(1) of Directive 2010/75/EU requires the Commission to organise an exchange of information on industrial emissions between it and Member States, the industries concerned and non-governmental organisations promoting environmental protection in order to facilitate the drawing up of best available techniques (BAT) reference documents as defined in Article 3(11) of that Directive.

(2) In accordance with Article 13(2) of Directive 2010/75/EU, the exchange of information is to address the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste and the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein and also the best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b) of Article 13(2) of that Directive.

(3) 'BAT conclusions' as defined in Article 3(12) of Directive 2010/75/EU are the key element of BAT reference documents and lay down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

(4) In accordance with Article 14(3) of Directive 2010/75/EU, BAT conclusions are to be the reference for setting the permit conditions for installations covered by Chapter 2 of that Directive.

(5) Article 15(3) of Directive 2010/75/EU requires the competent authority to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) of that Directive.

(6) Article 15(4) of Directive 2010/75 provides for derogations from the requirement laid down in Article 15(3) only where the costs associated with the achievement of emissions levels disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned.

(7) Article 16(1) of Directive 2010/75/EU provides that the monitoring requirements in the permit referred to in point (c) of Article 14(1) are to be based on the conclusions on monitoring as described in the BAT conclusions.

(8) In accordance with Article 21(3) of Directive 2010/75/EU, within four years of publication of decisions on BAT conclusions, the competent authority is to reconsider and, if necessary, update all the permit conditions and ensure that the installation complies with those permit conditions.

(9) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of the Directive 2010/75/EU on industrial emissions [2] established a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

[1] OJ L 334, 17.12.2010, p. 17.

[2] OJ C 146, 17.5.2011, p. 3.

(10) In accordance with Article 13(4) of Directive 2010/75/EU, the Commission obtained the opinion [1] of that forum on the proposed content of the BAT reference document for iron and steel production on 13 September 2011 and made it publicly available.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The BAT conclusions for iron and steel production are set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 28 February 2012.

For the Commission
Janez POTOČNIK
Member of the Commission

[1] http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/opinions_article

ANNEX

BAT CONCLUSIONS FOR IRON AND STEEL PRODUCTION

SCOPE

These BAT conclusions concern the following activities specified in Annex I to Directive 2010/75/EU, namely:

— activity 1.3: coke production

— activity 2.1: metal ore (including sulphide ore) roasting and sintering

— activity 2.2: production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour.

In particular, the BAT conclusions cover the following processes:

— the loading, unloading and handling of bulk raw materials

— the blending and mixing of raw materials

— the sintering and pelletisation of iron ore

— the production of coke from coking coal

— the production of hot metal by the blast furnace route, including slag processing

— the production and refining of steel using the basic oxygen process, including upstream ladle desulphurisation, downstream ladle metallurgy and slag processing

— the production of steel by electric arc furnaces, including downstream ladle metallurgy and slag processing

— continuous casting (thin slab/thin strip and direct sheet casting (near-shape))

These BAT conclusions do not address the following activities:

— production of lime in kilns, covered by the Cement, Lime and Magnesium Oxide Manufacturing Industries BREF (CLM)

— the treatment of dusts to recover non-ferrous metals (e.g. electric arc furnace dust) and the production of ferroalloys, covered by the Non-Ferrous Metals Industries BREF (NFM)

— sulphuric acid plants in coke ovens, covered by the Large Volume Inorganic Chemicals-Ammonia, Acids and Fertilisers Industries (LVIC-AAF BREF).

Other reference documents which are of relevance for the activities covered by these BAT conclusions are the following:

Reference documents	Activity
Large Combustion Plants BREF (LCP)	Combustion plants with a rated thermal input of 50 MW or more
Ferrous Metals Processing Industry BREF (FMP)	Downstream processes like rolling, pickling, coating, etc.
	Continuous casting to the thin slab/thin strip and direct sheet casting (near-shape)

Reference documents	Activity
Emissions from Storage BREF (EFS)	Storage and handling
Industrial Cooling Systems BREF (ICS)	Cooling systems
General Principles of Monitoring (MON)	Emissions and consumptions monitoring
Energy Efficiency BREF (ENE)	General energy efficiency
Economic and Cross-Media Effects (ECM)	Economic and cross-media effects of techniques

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

GENERAL CONSIDERATIONS

The environmental performance levels associated with BAT are expressed as ranges, rather than as single values. A range may reflect the differences within a given type of installation (e.g. differences in the grade/purity and quality of the final product, differences in design, construction, size and capacity of the installation) that result in variations in the environmental performances achieved when applying BAT

EXPRESSION OF EMISSION LEVELS ASSOCIATED WITH THE BEST AVAILABLE TECHNIQUES (BAT-AELs)

In these BAT conclusions, BAT-AELs for air emissions are expressed as either:

— mass of emitted substances per volume of waste gas under standard conditions (273,15 K, 101,3 kPa), after deduction of water vapour content, expressed in the units g/Nm^3, mg/Nm^3, $\mu g/Nm^3$ or ng/Nm^3; or

— mass of emitted substances per unit of mass of products generated or processed (consumption or emission factors), expressed in the units kg/t, g/t, mg/t or µg/t.

and BAT-AELs for emissions to water are expressed as:

— mass of emitted substances per volume of waste water, expressed in the units g/l, mg/l or µg/l.

DEFINITIONS

For the purposes of these BAT conclusions:

— 'new plant' means: a plant introduced on the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant on the existing foundations of the installation following the publication of these BAT conclusions

— 'existing plant' means: a plant which is not a new plant

— 'NO_X' means: the sum of nitrogen oxide (NO) and nitrogen dioxide (NO_2) expressed as NO_2

— 'SO_X' means: the sum of sulphur dioxide (SO_2) and sulphur trioxide (SO_3) expressed as SO_2

— 'HCl' means: all gaseous chlorides expressed as HCl

— 'HF' means: all gaseous fluorides expressed as HF

1.1. *General BAT Conclusions*

Unless otherwise stated, the BAT conclusions presented in this section are generally applicable.

The process specific BAT included in the Sections 1.2 – 1.7 apply in addition to the general BAT mentioned in this Section.

1.1.1. Environmental management systems

1. BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

I. commitment of management, including senior management;

II. definition of an environmental policy that includes continuous improvement for the installation by the management;

III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;

IV. implementation of the procedures paying particular attention to:

(i) structure and responsibility

(ii) training, awareness and competence

(iii) communication

(iv) employee involvement

(v) documentation

(vi) efficient process control

(vii) maintenance programmes

(viii) emergency preparedness and response

(ix) safeguarding compliance with environmental legislation;

V. checking performance and taking corrective action, paying particular attention to:

(i) monitoring and measurement (see also the Reference Document on the General Principles of Monitoring)

(ii) corrective and preventive action

(iii) maintenance of records

(iv) independent (where practicable) internal and external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

VI. review of the EMS and its continuing suitability, adequacy and effectiveness by senior management;

VII. following the development of cleaner technologies;

VIII. consideration for the environmental impacts from the eventual decommissioning of the installation at the stage of designing a new plant, and throughout its operating life;

IX. application of sectoral benchmarking on a regular basis.

Applicability

The scope (e.g. level of details) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2. Energy management

2. BAT is to reduce thermal energy consumption by using a combination of the following techniques:

I. improved and optimised systems to achieve smooth and stable processing, operating close to the process parameter set points by using

(i) process control optimisation including computer-based automatic control systems

(ii) modern, gravimetric solid fuel feed systems

(iii) preheating, to the greatest extent possible, considering the existing process configuration.

II. recovering excess heat from processes, especially from their cooling zones

III. an optimised steam and heat management

IV. applying process integrated reuse of sensible heat as much as possible.

In the context of energy management, see the Energy Efficiency BREF (ENE).

Description of BAT I.i

The following items are important for integrated steelworks in order to improve the overall energy efficiency:

— optimising energy consumption

— online monitoring for the most important energy flows and combustion processes at the site including the monitoring of all gas flares in order to prevent energy losses, enabling instant maintenance and achieving an undisrupted production process

— reporting and analysing tools to check the average energy consumption of each process

— defining specific energy consumption levels for relevant processes and comparing them on a long-term basis

— carrying out energy audits as defined in the Energy Efficiency BREF, e.g. to identify cost-effective energy savings opportunities.

Description of BAT II – IV

Process integrated techniques used to improve energy efficiency in steel manufacturing by improved heat recovery include:

— combined heat and power production with recovery of waste heat by heat exchangers and distribution either to other parts of the steelworks or to a district heating network

— the installation of steam boilers or adequate systems in large reheating furnaces (furnaces can cover a part of the steam demand)

— preheating of the combustion air in furnaces and other burning systems to save fuel, taking into consideration adverse effects, i.e. an increase of nitrogen oxides in the off-gas

— the insulation of steam pipes and hot water pipes

— recovery of heat from products, e.g. sinter

— where steel needs to be cooled, the use of both heat pumps and solar panels

— the use of flue-gas boilers in furnaces with high temperatures

— the oxygen evaporation and compressor cooling to exchange energy across standard heat exchangers

— the use of top recovery turbines to convert the kinetic energy of the gas produced in the blast furnace into electric power.

Applicability of BAT II – IV

Combined heat and power generation is applicable for all iron and steel plants close to urban areas with a suitable heat demand. The specific energy consumption depends on the scope of the process, the product quality and the type of installation (e.g. the amount of vacuum treatment at the basic oxygen furnace (BOF), annealing temperature, thickness of products, etc.).

3. BAT is to reduce primary energy consumption by optimisation of energy flows and optimised utilisation of the extracted process gases such as coke oven gas, blast furnace gas and basic oxygen gas.

Description

Process integrated techniques to improve energy efficiency in an integrated steelworks by optimising process gas utilisation include:

— the use of gas holders for all by-product gases or other adequate systems for short-term storage and pressure holding facilities

— increasing pressure in the gas grid if there are energy losses in the flares – in order to utilise more process gases with the resulting increase in the utilisation rate

— gas enrichment with process gases and different calorific values for different consumers

— heating fire furnaces with process gas

— use of a computer-controlled calorific value control system

— recording and using coke and flue-gas temperatures

— adequate dimensioning of the capacity of the energy recovery installations for the process gases, in particular with regard to the variability of process gases.

Applicability

The specific energy consumption depends on the scope of the process, the product quality and the type of installation (e.g. the amount of vacuum treatment at the BOF, annealing temperature, thickness of products, etc.).

4. BAT is to use desulphurised and dedusted surplus coke oven gas and dedusted blast furnace gas and basic oxygen gas (mixed or separate) in boilers or in combined heat and power plants to generate steam, electricity and/or heat using surplus waste heat for internal or external heating networks, if there is a demand from a third party.

Applicability

The cooperation and agreement of a third party may not be within the control of the operator, and therefore may not be within the scope of the permit.

5. BAT is to minimise electrical energy consumption by using one or a combination of the following techniques:

I. power management systems

II. grinding, pumping, ventilation and conveying equipment and other electricity-based equipment with high energy efficiency.

Applicability

Frequency controlled pumps cannot be used where the reliability of the pumps is of essential importance for the safety of the process.

1.1.3. Material management

6. BAT is to optimise the management and control of internal material flows in order to prevent pollution, prevent deterioration, provide adequate input quality, allow reuse and recycling and to improve the process efficiency and optimisation of the metal yield.

Description

Appropriate storage and handling of input materials and production residues can help to minimise the airborne dust emissions from stockyards and conveyor belts, including transfer points, and to avoid soil, groundwater and runoff water pollution (see also BAT 11).

The application of an adequate management of integrated steelworks and residues, including wastes, from other installations and sectors allows for a maximised internal and/or external use as raw materials (see also BAT 8, 9 and 10).

Material management includes the controlled disposal of small parts of the overall quantity of residues from an integrated steelworks which have no economic use.

7. In order to achieve low emission levels for relevant pollutants, BAT is to select appropriate scrap qualities and other raw materials. Regarding scrap, BAT is to undertake an appropriate inspection for visible contaminants which might contain heavy metals, in particular mercury, or might lead to the formation of polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB).

To improve the use of scrap, the following techniques can be used individually or in combination:

— specification of acceptance criteria suited to the production profile in purchase orders of scrap

— having a good knowledge of scrap composition by closely monitoring the origin of the scrap; in exceptional cases, a melt test might help characterise the composition of the scrap

— having adequate reception facilities and check deliveries

— having procedures to exclude scrap that is not suitable for use in the installation

— storing the scrap according to different criteria (e.g. size, alloys, degree of cleanliness); storing of scrap with potential release of contaminants to the soil on impermeable surfaces with a drainage and collection system; using a roof which can reduce the need for such a system

— putting together the scrap load for the different melts taking into account the knowledge of composition in order to use the most suitable scrap for the steel grade to be produced (this is essential in some cases to avoid the presence of undesired elements and in other cases to take advantage of alloy elements which are present in the scrap and needed for the steel grade to be produced)

— prompt return of all internally-generated scrap to the scrapyard for recycling

— having an operation and management plan

— scrap sorting to minimise the risk of including hazardous or non-ferrous contaminants, particularly polychlorinated biphenyls (PCB) and oil or grease. This is normally done by the scrap supplier but the operator inspects all scrap loads in sealed containers for safety reasons. Therefore, at the same time, it is possible to check, as far as practicable, for contaminants. Evaluation of the small quantities of plastic (e.g. as plastic coated components) may be required

— radioactivity control according to the United Nations Economic Commission for Europe (UNECE) Expert Group framework of recommendations

— implementation of the mandatory removal of components which contain mercury from End-of-Life Vehicles and Waste Electrical and Electronic Equipment (WEEE) by the scrap processors can be improved by:

— fixing the absence of mercury in scrap purchase contracts

— refusal of scrap which contains visible electronic components and assemblies.

Applicability

The selection and sorting of scrap might not be entirely within the control of the operator.

1.1.4. Management of process residues such as by-products and waste

8. BAT for solid residues is to use integrated techniques and operational techniques for waste minimisation by internal use or by application of specialised recycling processes (internally or externally).

Description

Techniques for the recycling of iron-rich residues include specialised recycling techniques such as the OxyCup® shaft furnace, the DK process, smelting reduction processes or cold bonded pelletting/briquetting as well as techniques for production residues mentioned in Sections 9.2 – 9.7.

Applicability

As the mentioned processes may be carried out by a third party, the recycling itself may not be within the control of the operator of the iron and steel plant, and therefore may not be within the scope of the permit.

9. BAT is to maximise external use or recycling for solid residues which cannot be used or recycled according to BAT 8, wherever this is possible and in line with waste regulations. BAT is to manage in a controlled manner residues which can neither be avoided nor recycled.

10. BAT is to use the best operational and maintenance practices for the collection, handling, storage and transport of all solid residues and for the hooding of transfer points to avoid emissions to air and water.

1.1.5. Diffuse dust emissions from materials storage, handling and transport of raw materials and (intermediate) products

11. BAT is to prevent or reduce diffuse dust emissions from materials storage, handling and transport by using one or a combination of the techniques mentioned below.

If abatement techniques are used, BAT is to optimise the capture efficiency and subsequent cleaning through appropriate techniques such as those mentioned below. Preference is given to the collection of the dust emissions nearest to the source.

I. General techniques include:

— the setting up within the EMS of the steelworks of an associated diffuse dust action plan;

— consideration of temporary cessation of certain operations where they are identified as a source of PM_{10} causing a high ambient reading; in order to do this, it will be necessary to have sufficient PM_{10} monitors, with associated wind direction and strength monitoring, to be able to triangulate and identify key sources of fine dust.

II. Techniques for the prevention of dust releases during the handling and transport of bulk raw materials include:

— orientation of long stockpiles in the direction of the prevailing wind

— installing wind barriers or using natural terrain to provide shelter

— controlling the moisture content of the material delivered

— careful attention to procedures to avoid the unnecessary handling of materials and long unenclosed drops

— adequate containment on conveyors and in hoppers, etc.

— the use of dust-suppressing water sprays, with additives such as latex, where appropriate

— rigorous maintenance standards for equipment

— high standards of housekeeping, in particular the cleaning and damping of roads

— the use of mobile and stationary vacuum cleaning equipment

— dust suppression or dust extraction and the use of a bag filter cleaning plant to abate sources of significant dust generation

— the application of emissions-reduced sweeping cars for carrying out the routine cleaning of hard surfaced roads.

III. Techniques for materials delivery, storage and reclamation activities include:

— total enclosure of unloading hoppers in a building equipped with filtered air extraction for dusty materials, or hoppers should be fitted with dust baffles and the unloading grids coupled to a dust extraction and cleaning system

— limiting the drop heights if possible to a maximum of 0,5 m

— the use of water sprays (preferably using recycled water) for dust suppression

— where necessary, the fitting of storage bins with filter units to control dust

— the use of totally enclosed devices for reclamation from bins

— where necessary, the storage of scrap in covered, and hard surfaced areas to reduce the risk of ground contamination (using just in time delivery to minimise the size of the yard and hence emissions)

— minimisation of the disturbance of stockpiles

— restriction of the height and a controlling of the general shape of stockpiles

— the use of in-building or in-vessel storage, rather than external stockpiles, if the scale of storage is appropriate

— the creation of windbreaks by natural terrain, banks of earth or the planting of long grass and evergreen trees in open areas to capture and absorb dust without suffering long-term harm

— hydro-seeding of waste tips and slag heaps

— implementation of a greening of the site by covering unused areas with top soil and planting grass, shrubs and other ground covering vegetation

— the moistening of the surface using durable dust-binding substances

— the covering of the surface with tarpaulins or coating (e.g. latex) stockpiles

— the application of storage with retaining walls to reduce the exposed surface

— when necessary, a measure could be to include impermeable surfaces with concrete and drainage.

IV. Where fuel and raw materials are delivered by sea and dust releases could be significant, some techniques include:

— use by operators of self-discharge vessels or enclosed continuous unloaders. Otherwise, dust generated by grab-type ship unloaders should be minimised through a combination of ensuring adequate moisture content of the material is delivered, by minimising drop heights and by using water sprays or fine water fogs at the mouth of the ship unloader hopper

— avoiding seawater in spraying ores or fluxes as this results in a fouling of sinter plant electrostatic precipitators with sodium chloride. Additional chlorine input in the raw materials may also lead to rising emissions (e.g. of polychlorinated dibenzodioxins/furans (PCDD/F)) and hamper filter dust recirculation

— storage of powdered carbon, lime and calcium carbide in sealed silos and conveying them pneumatically or storing and transferring them in sealed bags.

V. Train or truck unloading techniques include:

— if necessary due to dust emission formation, use of dedicated unloading equipment with a generally enclosed design.

VI. For highly drift-sensitive materials which may lead to significant dust release, some techniques include:

— use of transfer points, vibrating screens, crushers, hoppers and the like, which may be totally enclosed and extracted to a bag filter plant

— use of central or local vacuum cleaning systems rather than washing down for the removal of spillage, since the effects are restricted to one medium and the recycling of spilt material is simplified.

VII. Techniques for the handling and processing of slag include:

— keeping stockpiles of slag granulate damp for slag handling and processing since dried blast furnace slag and steel slag can give rise to dust

— use of enclosed slag-crushing equipment fitted with efficient extraction and bag filters to reduce dust emissions.

VIII. Techniques for handling scrap include:

— providing scrap storage under cover and/or on concrete floors to minimise dust lift-off caused by vehicle movements

IX. Techniques to consider during material transport include:

— the minimisation of points of access from public highways

— the employment of wheel-cleaning equipment to prevent the carryover of mud and dust onto public roads

— the application of hard surfaces to the transport roads (concrete or asphalt) to minimise the generation of dust clouds during materials transport and the cleaning of roads

— the restriction of vehicles to designated routes by fences, ditches or banks of recycled slag

— the damping of dusty routes by water sprays, e.g. at slag-handling operations

— ensuring that transport vehicles are not overfull, so as to prevent any spillage

— ensuring that transport vehicles are sheeted to cover the material carried

— the minimisation of numbers of transfers

— use of closed or enclosed conveyors

— use of tubular conveyors, where possible, to minimise material losses by changes of direction across sites usually provided by the discharge of materials from one belt onto another

— good practice techniques for molten metal transfer and ladle handling

— dedusting of conveyor transfer points.

1.1.6. Water and waste water management

12. BAT for waste water management is to prevent, collect and separate waste water types, maximising internal recycling and using an adequate treatment for each final flow. This includes techniques utilising, e.g. oil interceptors, filtration or sedimentation. In this context, the following techniques can be used where the prerequisites mentioned are present:

— avoiding the use of potable water for production lines

— increasing the number and/or capacity of water circulating systems when building new plants or modernising/revamping existing plants

— centralising the distribution of incoming fresh water

— using the water in cascades until single parameters reach their legal or technical limits

— using the water in other plants if only single parameters of the water are affected and further usage is possible

— keeping treated and untreated waste water separated; by this measure it is possible to dispose of waste water in different ways at a reasonable cost

— using rainwater whenever possible.

Applicability

The water management in an integrated steelworks will primarily be constrained by the availability and quality of fresh water and local legal requirements. In existing plants the existing configuration of the water circuits may limit applicability.

1.1.7. Monitoring

13. BAT is to measure or assess all relevant parameters necessary to steer the processes from control rooms by means of modern computer-based systems in order to adjust continuously and to optimise the processes online, to ensure stable and smooth processing, thus increasing energy efficiency and maximising the yield and improving maintenance practices.

14. BAT is to measure the stack emissions of pollutants from the main emission sources from all processes included in the Sections 1.2 – 1.7 whenever BAT-AELs are given and in process gas-fired power plants in iron and steel works.

BAT is to use continuous measurements at least for:

— primary emissions of dust, nitrogen oxides (NO_X) and sulphur dioxide (SO_2) from sinter strands

— nitrogen oxides (NO_X) and sulphur dioxide (SO_2) emissions from induration strands of pelletisation plants

— dust emissions from blast furnace cast houses

— secondary emissions of dust from basic oxygen furnaces

— emissions of nitrogen oxides (NO_X) from power plants

— dust emissions from large electric arc furnaces.

For other emissions, BAT is to consider using continuous emission monitoring depending on the mass flow and emission characteristics.

15. For relevant emission sources not mentioned in BAT 14, BAT is to measure the emissions of pollutants from all processes included in the Sections 1.2 – 1.7 and from process gas-fired power plants within iron and steel works as well as all relevant process gas components/pollutants periodically and discontinuously. This includes the discontinuous monitoring of process gases, stack emissions, polychlorinated dibenzodioxins/furans (PCDD/F) and monitoring the discharge of waste water, but excludes diffuse emissions (see BAT 16).

Description (relevant for BAT 14 and 15)

The monitoring of process gases provides information about the composition of process gases and about indirect emissions from the combustion of process gases, such as emissions of dust, heavy metals and SO_x.

Stack emissions can be measured by regular, periodic discontinuous measurements at relevant channelled emission sources over a sufficiently long period, to obtain representative emission values.

For monitoring the discharge of waste water a great variety of standardised procedures exist for sampling and analyzing water and waste water, including:

— a random sample which refers to a single sample taken from a waste water flow

— a composite sample, which refers to a sample taken continuously over a given period, or a sample consisting of several samples taken either continuously or discontinuously over a given period and blended

— a qualified random sample shall refer to a composite sample of at least five random samples taken over a maximum period of two hours at intervals of no less than two minutes, and blended.

Monitoring should be done according to the relevant EN or ISO standards. If EN or ISO standards are not available, national or other international standards should be used that ensure the provision of data of an equivalent scientific quality.

16. BAT is to determine the order of magnitude of diffuse emissions from relevant sources by the methods mentioned below. Whenever possible, direct measurement methods are preferred over indirect methods or evaluations based on calculations with emission factors.

— Direct measurement methods where the emissions are measured at the source itself. In this case, concentrations and mass streams can be measured or determined.

— Indirect measurement methods where the emission determination takes place at a certain distance from the source; a direct measurement of concentrations and mass stream is not possible.

— Calculation with emission factors.

Description

Direct or quasi-direct measurement

Examples for direct measurements are measurements in wind tunnels, with hoods or other methods like quasi-emissions measurements on the roof of an industrial installation. For the latter case, the wind velocity and the area of the roofline vent are measured and a flow rate is calculated. The cross-section of the measurement plane of the roofline vent is subdivided into sectors of identical surface area (grid measurement).

Indirect measurements

Examples of indirect measurements include the use of tracer gases, reverse dispersion modelling (RDM) methods and the mass balance method applying light detection and ranging (LIDAR).

Calculation of emissions with emission factors

Guidelines using emission factors for the estimation of diffuse dust emissions from storage and handling of bulk materials and for the suspension of dust from roadways due to traffic movements are:

— VDI 3790 Part 3

— US EPA AP 42

1.1.8. Decommissioning

17. BAT is to prevent pollution upon decommissioning by using necessary techniques as listed below.

Design considerations for end-of-life plant decommissioning:

I. giving consideration to the environmental impact from the eventual decommissioning of the installation at the stage of designing a new plant, as forethought makes decommissioning easier, cleaner and cheaper

II. decommissioning poses environmental risks for the contamination of land (and groundwater) and generates large quantities of solid waste; preventive techniques are process-specific but general considerations may include:

(i) avoiding underground structures

(ii) incorporating features that facilitate dismantling

(iii) choosing surface finishes that are easily decontaminated

(iv) using an equipment configuration that minimises trapped chemicals and facilitates drain-down or cleaning

(v) designing flexible, self-contained units that enable phased closure

(vi) using biodegradable and recyclable materials where possible.

1.1.9. Noise

18. BAT is to reduce noise emissions from relevant sources in the iron and steel manufacturing processes by using one or more of the following techniques depending on and according to local conditions:

— implementation of a noise-reduction strategy

— enclosure of the noisy operations/units

— vibration insulation of operations/units

— internal and external lining made of impact-absorbent material

— soundproofing buildings to shelter any noisy operations involving material transformation equipment

— building noise protection walls, e.g. the construction of buildings or natural barriers, such as growing trees and bushes between the protected area and the noisy activity

— outlet silencers on exhaust stacks

— lagging ducts and final blowers which are situated in soundproof buildings

— closing doors and windows of covered areas.

1.2. *BAT Conclusions For Sinter Plants*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all sinter plants.

Air emissions

19. BAT for blending/mixing is to prevent or reduce diffuse dust emissions by agglomerating fine materials by adjusting the moisture content (see also BAT 11).

20. BAT for primary emissions from sinter plants is to reduce dust emissions from the sinter strand waste gas by means of a bag filter.

BAT for primary emissions for existing plants is to reduce dust emissions from the sinter strand waste gas by using advanced electrostatic precipitators when bag filters are not applicable.

The BAT-associated emission level for dust is < 1 – 15 mg/Nm^3 for the bag filter and < 20 – 40 mg/Nm^3 for the advanced electrostatic precipitator (which should be designed and operated to achieve these values), both determined as a daily mean value.

Bag Filter

Description

Bag filters used in sinter plants are usually applied downstream of an existing electrostatic precipitator or cyclone but can also be operated as a standalone device.

Applicability

For existing plants requirements such as space for a downstream installation to the electrostatic precipitator can be relevant. Special regard should be given to the age and the performance of the existing electrostatic precipitator.

Advanced electrostatic precipitator

Description

Advanced electrostatic precipitators are characterised by one or a combination of the following features:

— good process control

— additional electrical fields

— adapted strength of the electric field

— adapted moisture content

— conditioning with additives

— higher or variably pulsed voltages

— rapid reaction voltage

— high energy pulse superimposition

— moving electrodes

— enlarging the electrode plate distance or other features which improves the abatement efficiency.

21. BAT for primary emissions from sinter strands is to prevent or reduce mercury emissions by selecting raw materials with a low mercury content (see BAT 7) or to treat waste gases in combination with activated carbon or activated lignite coke injection.

The BAT-associated emissions level for mercury is < 0,03 – 0,05 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

22. BAT for primary emissions from sinter strands is to reduce sulphur oxide (SO_X) emissions by using one or a combination of the following techniques:

I. lowering the sulphur input by using coke breeze with a low sulphur content

II. lowering the sulphur input by minimisation of coke breeze consumption

III. lowering the sulphur input by using iron ore with a low sulphur content

IV. injection of adequate adsorption agents into the waste gas duct of the sinter strand before dedusting by bag filter (see BAT 20)

V. wet desulphurisation or regenerative activated carbon (RAC) process (with particular consideration for the prerequisites for application).

The BAT-associated emission level for sulphur oxides (SO_X) using BAT I – IV is < 350 – 500 mg/Nm^3, expressed as sulphur dioxide (SO_2) and determined as a daily mean value, the lower value being associated with BAT IV.

The BAT-associated emission level for sulphur oxides (SO_X) using BAT V is < 100 mg/Nm^3, expressed as sulphur dioxide (SO_2) and determined as a daily mean value.

Description of the *RAC process* mentioned under BAT V

Dry desulphurisation techniques are based on an adsorption of SO_2 by activated carbon. When the SO_2-laden activated carbon is regenerated, the process is called regenerated activated carbon (RAC). In this case, a high quality, expensive activated carbon type may be used and sulphuric acid (H_2SO_4) is yielded as a by-product. The bed is regenerated either with water or thermally. In some cases, for 'fine-tuning' downstream of an existing desulphurisation unit, lignite-based activated carbon is used. In this case, the SO_2-laden activated carbon is usually incinerated under controlled conditions.

The RAC system can be developed as a single-stage or a two-stage process.

In the single-stage process, the waste gases are led through a bed of activated carbon and pollutants are adsorbed by the activated carbon. Additionally, NO_X removal occurs when ammonia (NH_3) is injected into the gas stream before the catalyst bed.

In the two-stage process, the waste gases are led through two beds of activated carbon. Ammonia can be injected before the bed to reduce NO_X emissions.

Applicability of techniques mentioned under BAT V

Wet desulphurisation: The requirements of space may be of significance and may restrict the applicability. High investment and operational costs and significant cross-media effects such as slurry generation and disposal and additional waste water treatment measures, have to be taken into account. This technique is not used in Europe at the time of writing, but might be an option where environmental quality standards are unlikely to be met through the application of other techniques.

RAC: Dust abatement should be installed prior to the RAC process to reduce the inlet dust concentration. Generally the layout of the plant and space requirements are important factors when considering this technique, but especially for a site with more than one sinter strand.

High investment and operational costs, in particular when high quality, expensive, activated carbon types may be used and a sulphuric acid plant is needed, have to be taken into account. This technique is not used in Europe at the time of writing, but might be an option in new plants targeting SO_X, NO_X, dust and PCDD/F simultaneously and in circumstances where environmental quality standards are unlikely to be met through the application of other techniques.

23. BAT for primary emissions from sinter strands is to reduce total nitrogen oxides (NO_X) emissions by using one or a combination of the following techniques:

I. process integrated measures which can include:

(i) waste gas recirculation

(ii) other primary measures, such as the use of anthracite or the use of low-NO_X burners for ignition

II. end-of-pipe techniques which can include

(i) the regenerative activated carbon (RAC) process

(ii) selective catalytic reduction (SCR).

The BAT-associated emission level for nitrogen oxides (NO_X) using process integrated measures is < 500 mg/Nm^3, expressed as nitrogen dioxide (NO_2) and determined as a daily mean value.

The BAT-associated emission level for nitrogen oxides (NO_X) using RAC is < 250 mg/Nm^3 and using SCR it is < 120 mg/Nm^3, expressed as nitrogen dioxide (NO_2), related to an oxygen content of 15 % and determined as daily mean values.

Description of *waste gas recirculation* under BAT I.i

In the partial recycling of waste gas, some portions of the sinter waste gas are recirculated to the sintering process. Partial recycling of waste gas from the whole strand was primarily developed to reduce waste gas flow and thus the mass emissions of major pollutants. Additionally it can lead to a decrease in energy consumption. The application of waste gas recirculation requires special efforts to ensure that the sinter quality and productivity are not affected negatively. Special attention needs to be paid to carbon monoxide (CO) in the recirculated waste gas in order to prevent carbon monoxide poisoning of employees. Various processes have been developed such as:

— partial recycling of waste gas from the whole strand

— recycling of waste gas from the end sinter strand combined with heat exchange

— recycling of waste gas from part of the end sinter strand and use of waste gas from the sinter cooler

— recycling of parts of waste gas to other parts of the sinter strand.

Applicability of BAT I.i

The applicability of this technique is site specific. Accompanying measures to ensure that sinter quality (cold mechanical strength) and strand productivity are not negatively affected must be considered. Depending on local conditions, these can be relatively minor and easy to implement or, on the contrary, they can be of a more fundamental nature and may be costly and difficult to introduce. In any case, the operating conditions of the strand should be reviewed when this technique is introduced.

In existing plants, it may not be possible to install a partial recycling of waste gas due to space restrictions.

Important considerations in determining the applicability of this technique include:

— initial configuration of the strand (e.g. dual or single wind-box ducts, space available for new equipment and, when required, lengthening of the strand)

— initial design of the existing equipment (e.g. fans, gas cleaning and sinter screening and cooling devices)

— initial operating conditions (e.g. raw materials, layer height, suction pressure, percentage of quick lime in the mix, specific flow rate, percentage of in-plant reverts returned in the feed)

— existing performance in terms of productivity and solid fuel consumption

— basicity index of the sinter and composition of the burden at the blast furnace (e.g. percentage of sinter versus pellet in the burden, iron content of these components).

Applicability of *other primary measures* under BAT I.ii

The use of anthracite depends on the availability of anthracites with a lower nitrogen content compared to coke breeze.

Description and applicability of the *RAC process* under BAT II.i see BAT 22.

Applicability of the *SCR* process under BAT II.ii

SCR can be applied within a high dust system, a low dust system and as a clean gas system. Until now, only clean gas systems (after dedusting and desulphurisation) have been applied at sinter plants. It is essential that the gas is low in dust (< 40 mg dust/Nm^3) and heavy metals, because they can make the surface of the catalyst ineffective. Additionally, desulphurisation prior to the catalyst might be required. Another prerequisite is a minimum off-gas temperature of about 300 °C. This requires an energy input.

The high investment and operational costs, the need for catalyst revitalisation, NH_3 consumption and slip, the accumulation of explosive ammonium nitrate (NH_4NO_3), the formation of corrosive SO_3 and the additional energy required for reheating which can reduce the possibilities for recovery of sensible heat from the sinter process, all may constrain the applicability. This technique might be an option where environmental quality standards are unlikely to be met through the application of other techniques.

24. BAT for primary emissions from sinter strands is to prevent and/or reduce emissions of polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) by using one or a combination of the following techniques:

I. avoidance of raw materials which contain polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) or their precursors as much as possible (see BAT 7)

II. suppression of polychlorinated dibenzodioxins/furans (PCDD/F) formation by addition of nitrogen compounds

III. waste gas recirculation (see BAT 23 for description and applicability).

25. BAT for primary emissions from sinter strands is to reduce emissions of polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) by the injection of adequate adsorption agents into the waste gas duct of the sinter strand before dedusting with a bag filter or advanced electrostatic precipitators when bag filters are not applicable (see BAT 20).

The BAT- associated emission level for polychlorinated dibenzodioxins/furans (PCDD/F) is < 0,05 – 0,2 ng I-TEQ/Nm^3 for the bag filter and < 0,2 – 0,4 ng-I-TEQ/Nm^3 for the advanced electrostatic precipitator, both determined for a 6 – 8 hour random sample under steady-state conditions.

26. BAT for secondary emissions from sinter strand discharge, sinter crushing, cooling, screening and conveyor transfer points is to prevent dust emissions and/or to achieve an efficient extraction and subsequently to reduce dust emissions by using a combination of the following techniques:

I. hooding and/or enclosure

II. an electrostatic precipitator or a bag filter.

The BAT-associated emission level for dust is < 10 mg/Nm^3 for the bag filter and < 30 mg/Nm^3 for the electrostatic precipitator, both determined as a daily mean value.

Water and waste water

27. BAT is to minimise water consumption in sinter plants by recycling cooling water as much as possible unless once-through cooling systems are used.

28. BAT is to treat the effluent water from sinter plants where rinsing water is used or where a wet waste gas treatment system is applied, with the exception of cooling water prior to discharge by using a combination of the following techniques:

I. heavy metal precipitation

II. neutralisation

III. sand filtration.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids	< 30 mg/l
— chemical oxygen demand (COD [1])	< 100 mg/l
— heavy metals	< 0,1 mg/l

(sum of arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), nickel (Ni), lead (Pb), and zinc (Zn)).

Production residues

29. BAT is to prevent waste generation within sinter plants by using one or a combination of the following techniques (see BAT 8):

I. selective on-site recycling of residues back to the sinter process by excluding heavy metals, alkali or chloride-enriched fine dust fractions (e.g. the dust from the last electrostatic precipitator field)

II. external recycling whenever on-site recycling is hampered.

BAT is to manage in a controlled manner sinter plant process residues which can neither be avoided nor recycled.

30. BAT is to recycle residues that may contain oil, such as dust, sludge and mill scale which contain iron and carbon from the sinter strand and other processes in the integrated steelworks, as much as possible back to the sinter strand, taking into account the respective oil content.

[1] In some cases, TOC is measured instead of COD (in order to avoid $HgCl_2$ used in the analysis for COD). The correlation between COD and TOC should be elaborated for each sinter plant case by case. The COD/TOC ratio may vary approximately between two and four.

31. BAT is to lower the hydrocarbon content of the sinter feed by appropriate selection and pretreatment of the recycled process residues.

In all cases, the oil content of the recycled process residues should be < 0,5 % and the content of the sinter feed < 0,1 %.

Description

The input of hydrocarbons can be minimised, especially by the reduction of the oil input. Oil enters the sinter feed mainly by addition of mill scale. The oil content of mill scales can vary significantly, depending on their origin.

Techniques to minimise oil input via dusts and mill scale include the following:

— limiting input of oil by segregating and then selecting only those dusts and mill scale with a low oil content

— the use of 'good housekeeping' techniques in the rolling mills can result in a substantial reduction in the contaminant oil content of mill scale

— de-oiling of mill scale by:

  — heating the mill scale to approximately 800 °C, the oil hydrocarbons are volatilised and clean mill scale is yielded; the volatilised hydrocarbons can be combusted.

  — extracting oil from the mill scale using a solvent.

Energy

32. BAT is to reduce thermal energy consumption within sinter plants by using one or a combination of the following techniques:

I. recovering sensible heat from the sinter cooler waste gas

II. recovering sensible heat, if feasible, from the sintering grate waste gas

III. maximising the recirculation of waste gases to use sensible heat (see BAT 23 for description and applicability).

Description

Two kinds of potentially reusable waste energies are discharged from the sinter plants:

— the sensible heat from the waste gases from the sintering machines

— the sensible heat of the cooling air from the sinter cooler.

Partial waste gas recirculation is a special case of heat recovery from waste gases from sintering machines and is dealt with in BAT 23. The sensible heat is transferred directly back to the sinter bed by the hot recirculated gases. At the time of writing (2010), this is the only practical method of recovering heat from the waste gases.

The sensible heat in the hot air from the sinter cooler can be recovered by one or more of the following ways:

— steam generation in a waste heat boiler for use in the iron and steel works

— hot water generation for district heating

— preheating combustion air in the ignition hood of the sinter plant

— preheating the sinter raw mix

— use of the sinter cooler gases in a waste gas recirculation system.

Applicability

At some plants, the existing configuration may make costs of heat recovery from the sinter waste gases or sinter cooler waste gas very high.

The recovery of heat from the waste gases by means of a heat exchanger would lead to unacceptable condensation and corrosion problems.

1.3. *BAT Conclusions For Pelletisation Plants*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all pelletisation plants.

Air emissions

33. BAT is to reduce the dust emissions in the waste gases from

— the raw materials pre-treatment, drying, grinding, wetting, mixing and the balling;

— from the induration strand; and

— from the pellet handling and screening

by using one or a combination of the following techniques:

I. an electrostatic precipitator

II. a bag filter

III. a wet scrubber

The BAT-associated emission level for dust is < 20 mg/Nm^3 for the crushing, grinding and drying and $< 10 - 15$ mg/Nm^3 for all other process steps or in cases where all waste gases are treated together, all determined as daily mean values.

34. BAT is to reduce the sulphur oxides (SO_X), hydrogen chloride (HCl) and hydrogen fluoride (HF) emissions from the induration strand waste gas by using one of the following techniques:

I. a wet scrubber

II. semi-dry absorption with a subsequent dedusting system

The BAT-associated emission levels, determined as daily mean values, for these compounds are:

— sulphur oxides (SO_X), expressed as sulphur dioxide (SO_2)	$< 30 - 50$ mg/Nm^3
— hydrogen fluoride (HF)	$< 1 - 3$ mg/Nm^3
— hydrogen chloride (HCl)	$< 1 - 3$ mg/Nm^3.

35. BAT is to reduce NO_X emissions from the drying and grinding section and induration strand waste gases by applying process-integrated techniques.

Description

Plant design through tailor-made solutions should be optimised for low nitrogen oxides (NO_X) emissions from all firing sections. The reduction of the formation of thermal NO_X can be achieved by lowering the (peak) temperature in the burners and reducing the excess oxygen in the combustion air. Additionally, lower NO_X emissions can be achieved by a combination of low energy use and low nitrogen content in the fuel (coal and oil).

36. BAT for existing plants is to reduce NO_X emissions from the drying and grinding section and induration strand waste gases by applying one of the following techniques:

I. selective catalytic reduction (SCR) as an end-of-pipe technique

II. any other technique with a NO_X reduction efficiency of at least 80 %.

Applicability

For existing plants, both straight grate and grate kiln systems, it is difficult to obtain the operating conditions necessary to suit an SCR reactor. Due to high costs, these end-of-pipe techniques should only be considered in circumstances where environmental quality standards are otherwise not likely to be met.

37. BAT for new plants is to reduce NO_X emissions from the drying and grinding section and induration strand waste gases by applying selective catalytic reduction (SCR) as an end-of-pipe technique.

Water and waste water

38. BAT for pelletisation plants is to minimise the water consumption and discharge of scrubbing, wet rinsing and cooling water and reuse it as much as possible.

39. BAT for pelletisation plants is to treat the effluent water prior to discharge by using a combination of the following techniques:

I. neutralisation

II. flocculation

III. sedimentation

IV. sand filtration

V. heavy metal precipitation.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids	< 50 mg/l
— chemical oxygen demand (COD [1])	< 160 mg/l
— Kjeldahl nitrogen	< 45 mg/l
— heavy metals	< 0,55 mg/l

(sum of arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), nickel (Ni), lead (Pb), zinc (Zn)).

Production residues

40. BAT is to prevent waste generation from pelletisation plants by effective on-site recycling or the reuse of residues (i.e. undersized green and heat-treated pellets)

BAT is to manage in a controlled manner pellet plant process residues, i.e. sludge from waste water treatment, which can neither be avoided nor recycled.

Energy

41. BAT is to reduce/minimise thermal energy consumption in pelletisation plants by using one or a combination of the following techniques:

I. process integrated reuse of sensible heat as far as possible from the different sections of the induration strand

II. using surplus waste heat for internal or external heating networks if there is demand from a third party.

[1] In some cases, TOC is measured instead of COD (in order to avoid $HgCl_2$ used in the analysis for COD). The correlation between COD and TOC should be elaborated for each pelletisation plant case by case. The COD/TOC ratio may vary approximately between two and four.

Description

Hot air from the primary cooling section can be used as secondary combustion air in the firing section. In turn, the heat from the firing section can be used in the drying section of the induration strand. Heat from the secondary cooling section can also be used in the drying section.

Excess heat from the cooling section can be used in the drying chambers of the drying and grinding unit. The hot air is transported through an insulated pipeline called a 'hot air recirculation duct'.

Applicability

Recovery of sensible heat is a process integrated part of pelletisation plants. The 'hot air recirculation duct' can be applied at existing plants with a comparable design and a sufficient supply of sensible heat.

The cooperation and agreement of a third party may not be within the control of the operator, and therefore may not be within the scope of the permit.

1.4. *BAT Conclusions For Coke Oven Plants*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all coke oven plants.

Air emissions

42. BAT for coal grinding plants (coal preparation including crushing, grinding, pulverising and screening) is to prevent or reduce dust emissions by using one or a combination of the following techniques:

I. building and/or device enclosure (crusher, pulveriser, sieves) and

II. efficient extraction and use of a subsequent dry dedusting systems.

The BAT-associated emission level for dust is < 10 – 20 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

43. BAT for storage and handling of pulverised coal is to prevent or reduce diffuse dust emissions by using one or a combination of the following techniques:

I. storing pulverised materials in bunkers and warehouses

II. using closed or enclosed conveyors

III. minimising the drop heights depending on the plant size and construction

IV. reducing emissions from charging of the coal tower and the charging car

V. using efficient extraction and subsequent dedusting.

When using BAT V, the BAT-associated emission level for dust is < 10 – 20 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

44. BAT is to charge coke oven chambers with emission-reduced charging systems.

Description

From an integrated point of view, 'smokeless' charging or sequential charging with double ascension pipes or jumper pipes are the preferred types, because all gases and dust are treated as part of the coke oven gas treatment.

If, however, the gases are extracted and treated outside the coke oven, charging with a land-based treatment of the extracted gases is the preferred method. Treatment should consist of an efficient extraction of the emissions with subsequent combustion to reduce organic compounds and the use of a bag filter to reduce particulates.

The BAT-associated emission level for dust from coal charging systems with land-based treatment of extracted gases is < 5 g/t coke equivalent to < 50 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

The duration associated with BAT of visible emissions from charging is < 30 seconds per charge as a monthly average using a monitoring method described in BAT 46.

45. BAT for coking is to extract the coke oven gas (COG) during coking as much as possible.

46. BAT for coke plants is to reduce the emissions through achieving continuous undisrupted coke production by using the following techniques:

I. extensive maintenance of oven chambers, oven doors and frame seals, ascension pipes, charging holes and other equipment (a systematic programme should be carried out by specially-trained detection and maintenance personnel)

II. avoiding strong temperature fluctuations

III. comprehensive observation and monitoring of the coke oven

IV. cleaning of doors, frame seals, charging holes, lids and ascension pipes after handling (applicable at new and, in some cases, existing plants)

V. maintaining a free gas-flow in the coke ovens

VI. adequate pressure regulation during coking and application of spring-loaded flexible sealing doors or knife-edged doors (in cases of ovens ≤ 5 m high and in good working order)

VII. using water-sealed ascension pipes to reduce visible emissions from the whole apparatus which provides a passage from the coke oven battery to the collecting main, gooseneck and stationary jumper pipes

VIII. luting charging hole lids with a clay suspension (or other suitable sealing material), to reduce visible emissions from all holes

IX. ensuring complete coking (avoiding green coke pushes) by application of adequate techniques

X. installing larger coke oven chambers (applicable to new plants or in some cases of a complete replacement of the plant on the old foundations)

XI. where possible, using variable pressure regulation to oven chambers during coking (applicable to new plants and can be an option for existing plants; the possibility of installing this technique in existing plants should be assessed carefully and is subject to the individual situation of every plant).

The percentage of visible emissions from all doors associated with BAT is < 5 – 10 %.

The percentage of visible emissions for all source types associated with BAT VII and BAT VIII is < 1 %.

The percentages are related to the frequency of any leaks compared to the total number of doors, ascension pipes or charging hole lids as a monthly average using a monitoring method as described below.

For the estimation of diffuse emissions from coke ovens the following methods are in use:

— the EPA 303 method

— the DMT (Deutsche Montan Technologie GmbH) methodology

— the methodology developed by BCRA (British Carbonisation Research Association).

— the methodology applied in the Netherlands, based on counting visible leaks of the ascension pipes and charging holes, while excluding visible emissions due to normal operations (coal charging, coke pushing).

47. BAT for the gas treatment plant is to minimise fugitive gaseous emissions by using the following techniques:

I. minimising the number of flanges by welding piping connections wherever possible

II. using appropriate sealings for flanges and valves

III. using gas-tight pumps (e.g. magnetic pumps)

IV. avoiding emissions from pressure valves in storage tanks by:

— connecting the valve outlet to the coke oven gas (COG) collecting main or

— collecting the gases and subsequent combustion.

Applicability

The techniques can be applied to both new and existing plants. In new plants, a gas tight design might be easier to achieve than in existing plants.

48. BAT is to reduce the sulphur content of the coke oven gas (COG) by using one of the following techniques:

I. desulphurisation by absorption systems

II. wet oxidative desulphurisation.

The residual hydrogen sulphide (H_2S) concentrations associated with BAT, determined as daily mean averages, are < 300 – 1 000 mg/Nm^3 in the case of using BAT I (the higher values being associated with higher ambient temperature and the lower values being associated with lower ambient temperature) and < 10 mg/Nm^3 in the case of using BAT II.

49. BAT for the coke oven underfiring is to reduce the emissions by using the following techniques:

I. preventing leakage between the oven chamber and the heating chamber by means of regular coke oven operation

II. repairing leakage between the oven chamber and the heating chamber (only applicable to existing plants)

III. incorporating low-nitrogen oxides (NO_X) techniques in the construction of new batteries, such as staged combustion and the use of thinner bricks and refractory with a better thermal conductivity (only applicable to new plants)

IV. using desulphurised coke oven gas (COG) process gases.

The BAT-associated emission levels, determined as daily mean values and relating to an oxygen content of 5 % are:

— sulphur oxides (SO_X), expressed as sulphur dioxide (SO_2) < 200 – 500 mg/Nm^3

— dust < 1 – 20 mg/Nm^3 ([1])

— nitrogen oxides (NO_X), expressed as nitrogen dioxide (NO_2) < 350 – 500 mg/Nm^3 for new or substantially revamped plants (less than 10 years old) and 500 – 650 mg/Nm^3 for older plants with well maintained batteries and incorporated low- nitrogen oxides (NO_X) techniques.

50. BAT for coke pushing is to reduce dust emissions by using the following techniques:

I. extraction by means of an integrated coke transfer machine equipped with a hood

II. using land-based extraction gas treatment with a bag filter or other abatement systems

III. using a one point or a mobile quenching car.

The BAT-associated emission level for dust from coke pushing is < 10 mg/Nm^3 in the case of bag filters and of < 20 mg/Nm^3 in other cases, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Applicability

At existing plants, lack of space may constrain the applicability.

([1]) The lower end of the range has been defined based on the performance of one specific plant achieved under real operating conditions by the BAT obtaining the best environmental performance.

51. BAT for coke quenching is to reduce dust emissions by using one of the following techniques:

I. using coke dry quenching (CDQ) with the recovery of sensible heat and the removal of dust from charging, handling and screening operations by means of a bag filter

II. using emission-minimised conventional wet quenching

III. using coke stabilisation quenching (CSQ).

The BAT-associated emission levels for dust, determined as the average over the sampling period, are:

— < 20 mg/Nm^3 in case of coke dry quenching

— < 25 g/t coke in case of emission minimised conventional wet quenching ([1])

— < 10 g/t coke in case of coke stabilisation quenching ([2]).

Description of BAT I

For the continuous operation of coke dry quenching plants, there are two options. In one case, the coke dry quenching unit comprises two to up to four chambers. One unit is always on stand by. Hence no wet quenching is necessary but the coke dry quenching unit needs an excess capacity against the coke oven plant with high costs. In the other case, an additional wet quenching system is necessary.

In case of modifying a wet quenching plant to a dry quenching plant, the existing wet quenching system can be retained for this purpose. Such a coke dry quenching unit has no excess processing capacity against the coke oven plant.

Applicability of BAT II

Existing quenching towers can be equipped with emissions reduction baffles. A minimum tower height of at least 30 m is necessary in order to ensure sufficient draught conditions.

Applicability of BAT III

As the system is larger than that necessary for conventional quenching, lack of space at the plant may be a constraint.

52. BAT for coke grading and handling is to prevent or reduce dust emissions by using the following techniques in combination:

I. use of building or device enclosures

II. efficient extraction and subsequent dry dedusting.

The BAT-associated emission level for dust is < 10 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Water and waste water

53. BAT is to minimise and reuse quenching water as much as possible.

54. BAT is to avoid the reuse of process water with a significant organic load (like raw coke oven waste water, waste water with a high content of hydrocarbons, etc.) as quenching water.

55. BAT is to pretreat waste water from the coking process and coke oven gas (COG) cleaning prior to discharge to a waste water treatment plant by using one or a combination of the following techniques:

I. using efficient tar and polycyclic aromatic hydrocarbons (PAH) removal by using flocculation and subsequent flotation, sedimentation and filtration individually or in combination

II. using efficient ammonia stripping by using alkaline and steam.

([1]) This level is based on the use of the non-isokinetic Mohrhauer method (former VDI 2303)
([2]) This level is based on the use of an isokinetic sampling method according to VDI 2066

56. BAT for pretreated waste water from the coking process and coke oven gas (COG) cleaning is to use biological waste water treatment with integrated denitrification/nitrification stages.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample and referring only to single coke oven water treatment plants, are:

— chemical oxygen demand (COD [1])	< 220 mg/l
— biological oxygen demand for 5 days (BOD_5)	< 20 mg/l
— sulphides, easily released [2]	< 0,1 mg/l
— thiocyanate (SCN^-)	< 4 mg/l
— cyanide (CN^-), easily released [3]	< 0,1 mg/l
— polycyclic aromatic hydrocarbons (PAH) (sum of Fluoranthene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Indeno[1,2,3-cd]pyrene and Benzo[g,h,i]perylene)	< 0,05 mg/l
— phenols	< 0,5 mg/l
— sum of ammonia-nitrogen (NH_4^+-N), nitrate-nitrogen (NO_3^--N) and nitrite-nitrogen (NO_2^--N)	< 15 – 50 mg/l.

Regarding the sum of ammonia-nitrogen (NH_4^+-N), nitrate-nitrogen (NO_3^--N) and nitrite-nitrogen (NO_2^--N), values of < 35 mg/l are usually associated with the application of advanced biological waste water treatment plants with predenitrification/nitrification and post-denitrification.

Production residues

57. BAT is to recycle production residues such as tar from the coal water and still effluent, and surplus activated sludge from the waste water treatment plant back to the coal feed of the coke oven plant.

Energy

58. BAT is to use the extracted coke oven gas (COG) as a fuel or reducing agent or for the production of chemicals.

1.5. *BAT Conclusions For Blast Furnaces*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all blast furnaces.

Air emissions

59. BAT for displaced air during loading from the storage bunkers of the coal injection unit is to capture dust emissions and perform subsequent dry dedusting.

The BAT-associated emission level for dust is < 20 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

60. BAT for burden preparation (mixing, blending) and conveying is to minimise dust emissions and, where relevant, extraction with subsequent dedusting by means of an electrostatic precipitator or bag filter.

(1) In some cases, TOC is measured instead of COD (in order to avoid $HgCl_2$ used in the analysis for COD). The correlation between COD and TOC should be elaborated for each coke oven plant case by case. The COD/TOC ratio may vary approximately between two and four.

(2) This level is based on the use of the DIN 38405 D 27 or any other national or international standard that ensures the provision of data of an equivalent scientific quality.

(3) This level is based on the use of the DIN 38405 D 13-2 or any other national or international standard that ensures the provision of data of an equivalent scientific quality.

61. BAT for casting house (tap holes, runners, torpedo ladles charging points, skimmers) is to prevent or reduce diffuse dust emissions by using the following techniques:

I. covering the runners

II. optimising the capture efficiency for diffuse dust emissions and fumes with subsequent off-gas cleaning by means of an electrostatic precipitator or bag filter

III. fume suppression using nitrogen while tapping, where applicable and where no collecting and dedusting system for tapping emissions is installed.

When using BAT II, the BAT-associated emission level for dust is < 1 – 15 mg/Nm^3, determined as a daily mean value.

62. BAT is to use tar-free runner linings.

63. BAT is to minimise the release of blast furnace gas during charging by using one or a combination of the following techniques:

I. bell-less top with primary and secondary equalising

II. gas or ventilation recovery system

III. use of blast furnace gas to pressurise the top bunkers.

Applicability of BAT II

Applicable for new plants. Applicable for existing plants only where the furnace has a bell-less charging system. It is not applicable to plants where gases other than blast furnace gas (e.g. nitrogen) are used to pressurise the furnace top bunkers.

64. BAT is to reduce dust emissions from the blast furnace gas by using one or a combination of the following techniques:

I. using dry prededusting devices such as:

(i) deflectors

(ii) dust catchers

(iii) cyclones

(iv) electrostatic precipitators.

II. subsequent dust abatement such as:

(i) hurdle-type scrubbers

(ii) venturi scrubbers

(iii) annular gap scrubbers

(iv) wet electrostatic precipitators

(v) disintegrators.

For cleaned blast furnace (BF) gas, the residual dust concentration associated with BAT is < 10 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

65. BAT for hot blast stoves is to reduce emissions by using desulphurised and dedusted surplus coke oven gas, dedusted blast furnace gas, dedusted basic oxygen furnace gas and natural gas, individually or in combination.

The BAT-associated emission levels, determined as daily mean values related to an oxygen content of 3 %, are:

— sulphur oxides (SO_x) expressed as sulphur dioxide (SO_2) < 200 mg/Nm^3

— dust < 10 mg/Nm^3

— nitrogen oxides (NO_x), expressed as nitrogen dioxide (NO_2) < 100 mg/Nm^3.

Water and waste water

66. BAT for water consumption and discharge from blast furnace gas treatment is to minimise and to reuse scrubbing water as much as possible, e.g. for slag granulation, if necessary after treatment with a gravel-bed filter.

67. BAT for treating waste water from blast furnace gas treatment is to use flocculation (coagulation) and sedimentation and the reduction of easily released cyanide, if necessary.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids	< 30 mg/l
— iron	< 5 mg/l
— lead	< 0,5 mg/l
— zinc	< 2 mg/l
— cyanide (CN^-), easily released [1]	< 0,4 mg/l.

Production residues

68. BAT is to prevent waste generation from blast furnaces by using one or a combination of the following techniques:

I. appropriate collection and storage to facilitate a specific treatment

II. on-site recycling of coarse dust from the blast furnace (BF) gas treatment and dust from the cast house dedusting, with due regard for the effect of emissions from the plant where it is recycled

III. hydrocyclonage of sludge with subsequent on-site recycling of the coarse fraction (applicable whenever wet dedusting is applied and where the zinc content distribution in the different grain sizes allows a reasonable separation)

IV. slag treatment, preferably by means of granulation (where market conditions allow for it), for the external use of slag (e.g. in the cement industry or for road construction).

BAT is to manage in a controlled manner blast furnace process residues which can neither be avoided nor recycled.

69. BAT for minimising slag treatment emissions is to condense fume if odour reduction is required.

Resource management

70. BAT for resource management of blast furnaces is to reduce coke consumption by directly injected reducing agents, such as pulverised coal, oil, heavy oil, tar, oil residues, coke oven gas (COG), natural gas and wastes such as metallic residues, used oils and emulsions, oily residues, fats and waste plastics individually or in combination.

Applicability

Coal injection: The method is applicable to all blast furnaces equipped with pulverised coal injection and oxygen enrichment.

Gas injection: Tuyère injection of coke oven gas (COG) is highly dependent upon the availability of the gas that may be effectively used elsewhere in the integrated steelworks.

[1] This level is based on the use of the DIN 38405 D 13-2 or any other national or international standard that ensures the provision of data of an equivalent scientific quality.

Plastic injection: It should be noted that this technique is highly dependent on the local circumstances and market conditions. Plastics can contain Cl and heavy metals like Hg, Cd, Pb and Zn. Depending on the composition of the wastes used (e.g. shredder light fraction), the amount of Hg, Cr, Cu, Ni and Mo in the BF gas may increase.

Direct injection of used oils, fats and emulsions as reducing agents and of solid iron residues: The continuous operation of this system is reliant on the logistical concept of delivery and the storage of residues. Also, the conveying technology applied is of particular importance for a successful operation.

Energy

71. BAT is to maintain a smooth, continuous operation of the blast furnace at a steady state to minimise releases and to reduce the likelihood of burden slips.

72. BAT is to use the extracted blast furnace gas as a fuel.

73. BAT is to recover the energy of top blast furnace gas pressure where sufficient top gas pressure and low alkali concentrations are present.

Applicability

Top gas pressure recovery can be applied at new plants and in some circumstances at existing plants, albeit with more difficulties and additional costs. Fundamental to the application of this technique is an adequate top gas pressure in excess of 1.5 bar gauge.

At new plants, the top gas turbine and the blast furnace (BF) gas cleaning facility can be adapted to each other in order to achieve a high efficiency of both scrubbing and energy recovery.

74. BAT is to preheat the hot blast stove fuel gases or combustion air using the waste gas of the hot blast stove and to optimise the hot blast stove combustion process.

Description

For optimisation of the energy efficiency of the hot stove, one or a combination of the following techniques can be applied:

— the use of a computer-aided hot stove operation

— preheating of the fuel or combustion air in conjunction with insulation of the cold blast line and waste gas flue

— use of more suitable burners to improve combustion

— rapid oxygen measurement and subsequent adaptation of combustion conditions.

Applicability

The applicability of fuel preheating depends on the efficiency of the stoves as this determines the waste gas temperature (e.g. at waste gas temperatures below 250 °C, heat recovery may not be a technically or economically viable option).

The implementation of computer-aided control could require the construction of a fourth stove in the case of blast furnaces with three stoves (if possible) in order to maximise benefits.

1.6. *BAT Conclusions For Basic Oxygen Steelmaking And Casting*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all basic oxygen steelmaking and casting.

Air emissions

75. BAT for basic oxygen furnace (BOF) gas recovery by suppressed combustion is to extract the BOF gas during blowing as much as possible and to clean it by using the following techniques in combination:

I. use of a suppressed combustion process

II. prededusting to remove coarse dust by means of dry separation techniques (e.g. deflector, cyclone) or wet separators

III. dust abatement by means of:

(i) dry dedusting (e.g. electrostatic precipitator) for new and existing plants

(ii) wet dedusting (e.g. wet electrostatic precipitator or scrubber) for existing plants.

The residual dust concentrations associated with BAT, after buffering the BOF gas, are:

— 10 – 30 mg/Nm^3 for BAT III.i

— < 50 mg/Nm^3 for BAT III.ii.

76. BAT for basic oxygen furnace (BOF) gas recovery during oxygen blowing in the case of full combustion is to reduce dust emissions by using one of the following techniques:

I. dry dedusting (e.g. ESP or bag filter) for new and existing plants

II. wet dedusting (e.g. wet ESP or scrubber) for existing plants.

The BAT-associated emission levels for dust, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour), are:

— 10 – 30 mg/Nm^3 for BAT I

— < 50 mg/Nm^3 for BAT II.

77. BAT is to minimise dust emissions from the oxygen lance hole by using one or a combination of the following techniques:

I. covering the lance hole during oxygen blowing

II. inert gas or steam injection into the lance hole to dissipate the dust

III. use of other alternative sealing designs combined with lance cleaning devices.

78. BAT for secondary dedusting, including the emissions from the following processes:

— reladling of hot metal from the torpedo ladle (or hot metal mixer) to the charging ladle

— hot metal pretreatment (i.e. the preheating of vessels, desulphurisation, dephosphorisation, deslagging, hot metal transfer processes and weighing)

— BOF-related processes like the preheating of vessels, slopping during oxygen blowing, hot metal and scrap charging, tapping of liquid steel and slag from BOF and

— secondary metallurgy and continuous casting,

is to minimise dust emissions by means of process integrated techniques, such as general techniques to prevent or control diffuse or fugitive emissions, and by using appropriate enclosures and hoods with efficient extraction and a subsequent off-gas cleaning by means of a bag filter or an ESP.

The overall average dust collection efficiency associated with BAT is > 90 %

The BAT-associated emission level for dust, as a daily mean value, for all dedusted off-gases is < 1 – 15 mg/Nm^3 in the case of bag filters and < 20 mg/Nm^3 in the case of electrostatic precipitators.

If the emissions from hot metal pretreatment and the secondary metallurgy are treated separately, the BAT-associated emission level for dust, as a daily mean value, is < 1 – 10 mg/Nm^3 for bag filters and < 20 mg/Nm^3 for electrostatic precipitators.

Description

General techniques to prevent diffuse and fugitive emissions from the relevant BOF process secondary sources include:

— independent capture and use of dedusting devices for each subprocess in the BOF shop

— correct management of the desulphurisation installation to prevent air emissions

— total enclosure of the desulphurisation installation

— maintaining the lid on when the hot metal ladle is not in use and the cleaning of hot metal ladles and removal of skulls on a regular basis or alternatively apply a roof extraction system

— maintaining the hot metal ladle in front of the converter for approximately two minutes after putting the hot metal into the converter if a roof extraction system is not applied

— computer control and optimisation of the steelmaking process, e.g. so that slopping (i.e. when the slag foams to such an extent that it flows out of the vessel) is prevented or reduced

— reduction of slopping during tapping by limiting elements that cause slopping and the use of anti-slopping agents

— closure of doors from the room around the converter during oxygen blowing

— continuous camera observation of the roof for visible emission

— the use of a roof extraction system.

Applicability

In existing plants, the design of the plant may restrict the possibilities for proper evacuation.

79. BAT for on-site slag processing is to reduce dust emissions by using one or a combination of the following techniques:

I. efficient extraction of the slag crusher and screening devices with subsequent off-gas cleaning, if relevant

II. transport of untreated slag by shovel loaders

III. extraction or wetting of conveyor transfer points for broken material

IV. wetting of slag storage heaps

V. use of water fogs when broken slag is loaded.

The BAT-associated emission level for dust in the case of using BAT I is < 10 – 20 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Water and waste water

80. BAT is to prevent or reduce water use and waste water emissions from primary dedusting of basic oxygen furnace (BOF) gas by using one of the following techniques as set out in BAT 75 and BAT 76:

— dry dedusting of basic oxygen furnace (BOF) gas;

— minimising scrubbing water and reusing it as much as possible(e.g. for slag granulation) in case wet dedusting is applied.

81. BAT is to minimise the waste water discharge from continuous casting by using the following techniques in combination:

I. the removal of solids by flocculation, sedimentation and/or filtration

II. the removal of oil in skimming tanks or any other effective device

III. the recirculation of cooling water and water from vacuum generation as much as possible.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, for waste water from continuous casting machines are:

— suspended solids < 20 mg/l

— iron < 5 mg/l

— zinc < 2 mg/l

— nickel < 0,5 mg/l

— total chromium < 0,5 mg/l

— total hydrocarbons < 5 mg/l.

Production residues

82. BAT is to prevent waste generation by using one or a combination of the following techniques (see BAT 8):

I. appropriate collection and storage to facilitate a specific treatment

II. on-site recycling of dust from basic oxygen furnace (BOF) gas treatment, dust from secondary dedusting and mill scale from continuous casting back to the steelmaking processes with due regard for the effect of emissions from the plant where they are recycled

III. on-site recycling of BOF slag and BOF slag fines in various applications

IV. slag treatment where market conditions allow for the external use of slag (e.g. as an aggregate in materials or for construction)

V. use of filter dusts and sludge for external recovery of iron and non-ferrous metals such as zinc in the non-ferrous metals industry

VI. use of a settling tank for sludge with the subsequent recycling of the coarse fraction in the sinter/blast furnace or cement industry when grain size distribution allows for a reasonable separation.

Applicability of BAT V

Dust hot briquetting and recycling with recovery of high zinc concentrated pellets for external reuse is applicable when a dry electrostatic precipitation is used to clean the BOF gas. Recovery of zinc by briquetting is not applicable in wet dedusting systems because of unstable sedimentation in the settling tanks caused by the formation of hydrogen (from a reaction of metallic zinc and water). Due to these safety reasons, the zinc content in the sludge should be limited to 8 – 10 %.

BAT is to manage in a controlled manner basic oxygen furnace process residues which can neither be avoided nor recycled.

Energy

83. BAT is to collect, clean and buffer BOF gas for subsequent use as a fuel.

Applicability

In some cases, it may not be economically feasible or, with regard to appropriate energy management, not feasible to recover the BOF gas by suppressed combustion. In these cases, the BOF gas may be combusted with the generation of steam. The kind of combustion (full or suppressed combustion) depends on local energy management.

84. BAT is to reduce energy consumption by using ladle-lid systems.

Applicability

The lids can be very heavy as they are made out of refractory bricks and therefore the capacity of the cranes and the design of the whole building may constrain the applicability in existing plants. There are different technical designs for implementing the system into the particular conditions of a steel plant.

85. BAT is to optimise the process and reduce energy consumption by using a direct tapping process after blowing.

Description

Direct tapping normally requires expensive facilities like sub-lance or DROP IN sensor-systems to tap without waiting for a chemical analysis of the samples taken (direct tapping). Alternatively, a new technique has been developed to achieve direct tapping without such facilities. This technique requires a lot of experience and developmental work. In practice, the carbon is directly blown down to 0,04 % and simultaneously the bath temperature decreases to a reasonably low target. Before tapping, both the temperature and oxygen activity are measured for further actions.

Applicability

A suitable hot metal analyser and slag stopping facilities are required and the availability of a ladle furnace facilitates implementation of the technique.

86. BAT is to reduce energy consumption by using continuous near net shape strip casting, if the quality and the product mix of the produced steel grades justify it.

Description

Near net shape strip casting means the continuous casting of steel to strips with thicknesses of less than 15 mm. The casting process is combined with the direct hot rolling, cooling and coiling of the strips without an intermediate reheating furnace used for conventional casting techniques, e.g. continuous casting of slabs or thin slabs. Therefore, strip casting represents a technique for producing flat steel strips of different widths and thicknesses of less than 2 mm.

Applicability

The applicability depends on the produced steel grades (e.g. heavy plates cannot be produced with this process) and on the product portfolio (product mix) of the individual steel plant. In existing plants, the applicability may be constrained by the layout and the available space as e.g. retrofitting with a strip caster requires approximately 100 m in length.

1.7. *BAT Conclusions For Electric Arc Furnace Steelmaking And Casting*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all electric arc furnace steelmaking and casting.

Air emissions

87. BAT for the electric arc furnace (EAF) process is to prevent mercury emissions by avoiding, as much as possible, raw materials and auxiliaries which contain mercury (see BAT 6 and 7).

88. BAT for the electric arc furnace (EAF) primary and secondary dedusting (including scrap preheating, charging, melting, tapping, ladle furnace and secondary metallurgy) is to achieve an efficient extraction of all emission sources by using one of the techniques listed below and to use subsequent dedusting by means of a bag filter:

I. a combination of direct off-gas extraction (4th or 2nd hole) and hood systems

II. direct gas extraction and doghouse systems

III. direct gas extraction and total building evacuation (low-capacity electric arc furnaces (EAF) may not require direct gas extraction to achieve the same extraction efficiency).

The overall average collection efficiency associated with BAT is > 98 %.

The BAT-associated emission level for dust is < 5 mg/Nm^3, determined as a daily mean value.

The BAT-associated emission level for mercury is < 0,05 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least four hours).

89. BAT for the electric arc furnace (EAF) primary and secondary dedusting (including scrap preheating, charging, melting, tapping, ladle furnace and secondary metallurgy) is to prevent and reduce polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) emissions by avoiding, as much as possible, raw materials which contain PCDD/F and PCB or their precursors (see BAT 6 and 7) and using one or a combination of the following techniques, in conjunction with an appropriate dust removal system:

I. appropriate post-combustion

II. appropriate rapid quenching

III. injection of adequate adsorption agents into the duct before dedusting.

The BAT-associated emission level for polychlorinated dibenzodioxins/furans (PCDD/F) is < 0,1 ng I-TEQ/Nm^3, based on a 6 – 8 hour random sample during steady-state conditions. In some cases, the BAT-associated emission level can be achieved with primary measures only.

Applicability of BAT I

In existing plants, circumstances like available space, given off-gas duct system, etc. need to be taken into consideration for assessing the applicability.

90. BAT for on-site slag processing is to reduce dust emissions by using one or a combination of the following techniques:

I. efficient extraction of the slag crusher and screening devices with subsequent off-gas cleaning, if relevant

II. transport of untreated slag by shovel loaders

III. extraction or wetting of conveyor transfer points for broken material

IV. wetting of slag storage heaps

V. use of water fogs when broken slag is loaded.

In the case of using BAT I, the BAT-associated emission level for dust is < 10 – 20 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Water and waste water

91. BAT is to minimise the water consumption from the electric arc furnace (EAF) process by the use of closed loop water cooling systems for the cooling of furnace devices as much as possible unless once-through cooling systems are used.

92. BAT is to minimise the waste water discharge from continuous casting by using the following techniques in combination:

I. the removal of solids by flocculation, sedimentation and/or filtration

II. the removal of oil in skimming tanks or in any other effective device

III. the recirculation of cooling water and water from vacuum generation as much as possible.

The BAT-associated emission levels, for waste water from continuous casting machines, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids < 20 mg/l

— iron < 5 mg/l

— zinc < 2 mg/l

— nickel < 0,5 mg/l

— total chromium < 0,5 mg/l

— total hydrocarbons < 5 mg/l

Production residues

93. BAT is to prevent waste generation by using one or a combination of the following techniques:

I. appropriate collection and storage to facilitate a specific treatment

II. recovery and on-site recycling of refractory materials from the different processes and use internally, i.e. for the substitution of dolomite, magnesite and lime

III. use of filter dusts for the external recovery of non-ferrous metals such as zinc in the non-ferrous metals industry, if necessary, after the enrichment of filter dusts by recirculation to the electric arc furnace (EAF)

IV. separation of scale from continuous casting in the water treatment process and recovery with subsequent recycling, e.g. in the sinter/blast furnace or cement industry

V. external use of refractory materials and slag from the electric arc furnace (EAF) process as a secondary raw material where market conditions allow for it.

BAT is to manage in a controlled manner EAF process residues which can neither be avoided nor recycled.

Applicability

The external use or recycling of production residues as mentioned under BAT III – V depend on the cooperation and agreement of a third party which may not be within the control of the operator, and therefore may not be within the scope of the permit.

Energy

94. BAT is to reduce energy consumption by using continuous near net shape strip casting, if the quality and the product mix of the produced steel grades justify it.

Description

Near net shape strip casting means the continuous casting of steel to strips with thicknesses of less than 15 mm. The casting process is combined with the direct hot rolling, cooling and coiling of the strips without an intermediate reheating furnace used for conventional casting techniques, e.g. continuous casting of slabs or thin slabs. Therefore, strip casting represents a technique for producing flat steel strips of different widths and thicknesses of less than 2 mm.

Applicability

The applicability depends on the produced steel grades (e.g. heavy plates cannot be produced with this process) and on the product portfolio (product mix) of the individual steel plant. In existing plants, the applicability may be constrained by the layout and the available space as e.g. retrofitting with a strip caster requires approximately 100 m in length.

Noise

95. BAT is to reduce noise emissions from electric arc furnace (EAF) installations and processes generating high sound energies by using a combination of the following constructional and operational techniques depending on and according to local conditions (in addition to using the techniques listed in BAT 18):

I. construct the electric arc furnace (EAF) building in such a way as to absorb noise from mechanical shocks resulting from the operation of the furnace

II. construct and install cranes destined to transport the charging baskets to prevent mechanical shocks

III. special use of acoustical insulation of the inside walls and roofs to prevent the airborne noise of the electric arc furnace (EAF) building

IV. separation of the furnace and the outside wall to reduce the structure-borne noise from the electric arc furnace (EAF) building

V. housing of processes generating high sound energies (i.e. electric arc furnace (EAF) and decarburisation units) within the main building.

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[1] Text with EEA relevance

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

II

(Non-legislative acts)

DECISIONS

COMMISSION IMPLEMENTING DECISION

of 28 February 2012

establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the manufacture of glass

(notified under document C(2012) 865)

(Text with EEA relevance)

(2012/134/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) ([1]) and in particular Article 13(5) thereof,

Whereas:

(1) Article 13(1) of Directive 2010/75/EU requires the Commission to organise an exchange of information on industrial emissions between it and Member States, the industries concerned and non-governmental organisations promoting environmental protection in order to facilitate the drawing up of best available techniques (BAT) reference documents as defined in Article 3(11) of that Directive.

(2) In accordance with Article 13(2) of Directive 2010/75/EU, the exchange of information is to address the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste and the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein and best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b) of Article 13(2) of that Directive.

([1]) OJ L 334, 17.12.2010, p. 17.

(3) 'BAT conclusions' as defined in Article 3(12) of Directive 2010/75/EU are the key element of BAT reference documents and lay down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

(4) In accordance with Article 14(3) of Directive 2010/75/EU, BAT conclusions are to be the reference for setting permit conditions for installations covered by Chapter 2 of that Directive.

(5) Article 15(3) of Directive 2010/75/EU requires the competent authority to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) of Directive 2010/75/EU.

(6) Article 15(4) of Directive 2010/75/EU provides for derogations from the requirement laid down in Article 15(3) only where the costs associated with the achievement of emissions levels disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned.

(7) Article 16(1) of Directive 2010/75/EU provides that the monitoring requirements in the permit referred to in point (c) of Article 14(1) of the Directive are to be based on the conclusions on monitoring as described in the BAT conclusions.

(8) In accordance with Article 21(3) of Directive 2010/75/EU, within 4 years of publication of decisions on BAT conclusions, the competent authority is to reconsider and, if necessary, update all the permit conditions and ensure that the installation complies with those permit conditions.

(9) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of Directive 2010/75/EU on industrial emissions [1] established a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

(10) In accordance with Article 13(4) of Directive 2010/75/EU, the Commission obtained the opinion [2] of that forum on the proposed content of the BAT reference document for the manufacture of glass on 13 September 2011 and made it publicly available.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The BAT conclusions for the manufacture of glass are set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 28 February 2012.

For the Commission
Janez POTOČNIK
Member of the Commission

[1] OJ C 146, 17.5.2011, p. 3.
[2] http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/opinions_article

ANNEX

BAT CONCLUSIONS FOR THE MANUFACTURE OF GLASS

SCOPE

These BAT conclusions concern the industrial activities specified in Annex I to Directive 2010/75/EU, namely:

— 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day;

— 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day.

These BAT conclusions do not address the following activities:

— Production of water glass, covered by the reference document Large Volume Inorganic Chemicals – Solids and Other Industry (LVIC-S)

— Production of polycrystalline wool

— Production of mirrors, covered by the reference document Surface Treatment Using Organic Solvents (STS)

Other reference documents which are of relevance for the activities covered by these BAT conclusions are the following:

Reference documents	Activity
Emissions from Storage (EFS)	Storage and handling of raw materials
Energy Efficiency (ENE)	General energy efficiency
Economic and Cross-Media Effects (ECM)	Economics and cross-media effects of techniques
General Principles of Monitoring (MON)	Emissions and consumption monitoring

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

DEFINITIONS

For the purposes of these BAT conclusions, the following definitions apply:

Term used	Definition
New plant	A plant introduced on the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant on the existing foundations of the installation following the publication of these BAT conclusions
Existing plant	A plant which is not a new plant
New furnace	A furnace introduced on the site of the installation following the publication of these BAT conclusions or a complete rebuild of a furnace following the publication of these BAT conclusions
Normal furnace rebuild	A rebuild between campaigns without a significant change in furnace requirements or technology and in which the furnace frame is not significantly adjusted and the furnace dimensions remain basically unchanged. The refractory of the furnace and, where appropriate, the regenerators are repaired by the full or partial replacement of the material.
Complete furnace rebuild	A rebuild involving a major change in the furnace requirements or technology and with major adjustment or replacement of the furnace and associated equipments.

GENERAL CONSIDERATIONS

Averaging periods and reference conditions for air emissions

Unless stated otherwise, emission levels associated with the best available techniques (BAT-AELs) for air emissions given in these BAT conclusions apply under the reference conditions shown in Table 1. All values for concentrations in waste gases refer to standard conditions: dry gas, temperature 273,15 K, pressure 101,3 kPa.

For discontinuous measurements	BAT-AELs refer to the average value of three spot samples of at least 30 minutes each; for regenerative furnaces the measuring period should cover a minimum of two firing reversals of the regenerator chambers
For continuous measurements	BAT-AELs refer to daily average values

Table 1

Reference conditions for BAT-AELs concerning air emissions

Activities		Unit	Reference conditions
Melting activities	Conventional melting furnace in continuous melters	mg/Nm^3	8 % oxygen by volume
	Conventional melting furnace in discontinuous melters	mg/Nm^3	13 % oxygen by volume
	Oxy-fuel-fired furnaces	kg/tonne melted glass	The expression of emission levels measured as mg/Nm^3 to a reference oxygen concentration is not applicable
	Electric furnaces	mg/Nm^3 or kg/tonne melted glass	The expression of emission levels measured as mg/Nm^3 to a reference oxygen concentration is not applicable
	Frit melting furnaces	mg/Nm^3 or kg/tonne melted frit	Concentrations refer to 15 % oxygen by volume. When air-gas firing is used, BAT AELs expressed as emission concentration (mg/Nm^3) apply. When only oxy-fuel firing is employed, BAT AELs expressed as specific mass emissions (kg/tonne melted frit) apply. When oxygen-enriched air-fuel firing is used, BAT AELs expressed as either emission concentration (mg/Nm^3) or as specific mass emissions (kg/tonne melted frit) apply
	All type of furnaces	kg/tonne melted glass	The specific mass emissions refer to 1 tonne of melted glass
Non-melting activities, including downstream processes	All processes	mg/Nm^3	No correction for oxygen
	All processes	kg/tonne glass	The specific mass emissions refer to 1 tonne of produced glass

Conversion to reference oxygen concentration

The formula for calculating the emissions concentration at a reference oxygen level (see Table 1) is shown below.

$$E_R = \frac{21 - O_R}{21 - O_M} \times E_M$$

Where:

E_R (mg/Nm^3): emissions concentration corrected to the reference oxygen level O_R

O_R (vol %): reference oxygen level

E_M (mg/Nm^3): emissions concentration referred to the measured oxygen level O_M

O_M (vol %): measured oxygen level.

Conversion from concentrations to specific mass emissions

BAT-AELs given in Sections 1.2 to 1.9 as specific mass emissions (kg/tonne melted glass) are based on the calculation reported below except for oxy-fuel fired furnaces and, in a limited number of cases, for electric melting where BAT-AELs given in kg/tonne melted glass were derived from specific reported data.

The calculation procedure used for the conversion from concentrations to specific mass emissions is shown below.

Specific mass emission (kg/tonne of melted glass) = conversion factor × emissions concentration (mg/Nm^3)

Where: conversion factor = $(Q/P) \times 10^{-6}$

with Q = waste gas volume in Nm^3/h

P = pull rate in tonnes of melted glass/h.

The waste gas volume (Q) is determined by the specific energy consumption, type of fuel, and the oxidant (air, air enriched by oxygen and oxygen with purity depending on the production process). The energy consumption is a complex function of (predominantly) the type of furnace, the type of glass and the cullet percentage.

However, a range of factors can influence the relationship between concentration and specific mass flow, including:

— type of furnace (air preheating temperature, melting technique)

— type of glass produced (energy requirement for melting)

— energy mix (fossil fuel/electric boosting)

— type of fossil fuel (oil, gas)

— type of oxidant (oxygen, air, oxygen-enriched air)

— cullet percentage

— batch composition

— age of the furnace

— furnace size.

The conversion factors given in Table 2 have been used for converting BAT-AELs from concentrations into specific mass emissions.

The conversion factors have been determined on the basis of energy efficient furnaces and relate only to full air/fuel-fired furnaces.

Table 2

Indicative factors used for converting mg/Nm^3 into kg/tonne of melted glass based on energy efficient fuel-air furnaces

Sectors		Factors to convert mg/Nm^3 into kg/tonne of melted glass
Flat glass		$2,5 \times 10^{-3}$
Container glass	General case	$1,5 \times 10^{-3}$
	Specific cases [1]	Case-by-case study (often $3,0 \times 10^{-3}$)
Continuous filament glass fibre		$4,5 \times 10^{-3}$

Sectors		Factors to convert mg/Nm^3 into kg/tonne of melted glass
Domestic glass	Soda lime	$2,5 \times 10^{-3}$
	Specific cases (2)	Case-by-case study (between 2,5 and > 10×10^{-3}; often $3,0 \times 10^{-3}$)
Mineral wool	Glass wool	2×10^{-3}
	Stone wool cupola	$2,5 \times 10^{-3}$
Special glass	TV glass (panels)	3×10^{-3}
	TV glass (funnel)	$2,5 \times 10^{-3}$
	Borosilicate (tube)	4×10^{-3}
	Glass ceramics	$6,5 \times 10^{-3}$
	Lighting glass (soda-lime)	$2,5 \times 10^{-3}$
Frits		Case-by-case study (between $5 - 7,5 \times 10^{-3}$)

(1) Specific cases correspond to less favourable cases (i.e. small special furnaces with a production of generally below 100 tonnes/day and a cullet rate of below 30 %). This category represents only 1 or 2 % of the container glass production.
(2) Specific cases corresponding to less favourable cases and/or non-soda-lime glasses: borosilicates, glass ceramic, crystal glass and, less frequently, lead crystal glass.

DEFINITIONS FOR CERTAIN AIR POLLUTANTS

For the purpose of these BAT conclusions and for the BAT-AELs reported in Sections 1.2 to 1.9, the following definitions apply:

NO_X expressed as NO_2	The sum of nitrogen oxide (NO) and nitrogen dioxide (NO_2) expressed as NO_2
SO_X expressed as SO_2	The sum of sulphur dioxide (SO_2) and sulphur trioxide (SO_3) expressed as SO_2
Hydrogen chloride expressed as HCl	All gaseous chlorides expressed as HCl
Hydrogen fluoride expressed as HF	All gaseous fluorides expressed as HF

AVERAGING PERIODS FOR WASTE WATER DISCHARGES

Unless stated otherwise, emission levels associated with the best available techniques (BAT-AELs) for waste water emissions given in these BAT conclusions refer to the average value of a composite sample taken over a period of 2 hours or 24 hours.

1.1. *General BAT conclusions for the manufacture of glass*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all installations.

The process-specific BAT included in Sections 1.2 – 1.9 apply in addition to the general BAT mentioned in this section.

1.1.1. Environmental management systems

1. BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

(i) commitment of the management, including senior management;

(ii) definition of an environmental policy that includes the continuous improvement for the installation by the management;

(iii) planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;

(iv) implementation of the procedures paying particular attention to:

(a) structure and responsibility

(b) training, awareness and competence

(c) communication

(d) employee involvement

(e) documentation

(f) efficient process control

(g) maintenance programmes

(h) emergency preparedness and response

(i) safeguarding compliance with environmental legislation.

(v) checking performance and taking corrective action, paying particular attention to:

(a) monitoring and measurement (see also the reference document on the General Principles of Monitoring)

(b) corrective and preventive action

(c) maintenance of records

(d) independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

(vi) review of the EMS and its continuing suitability, adequacy and effectiveness by senior management;

(vii) following the development of cleaner technologies;

(viii) consideration for the environmental impacts from the eventual decommissioning of the installation at the stage of designing a new plant, and throughout its operating life;

(ix) application of sectoral benchmarking on a regular basis.

Applicability

The scope (e.g. level of details) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2. Energy efficiency

2. BAT is to reduce the specific energy consumption by using one or a combination of the following techniques:

Technique	Applicability
(i) Process optimisation, through the control of the operating parameters	The techniques are generally applicable
(ii) Regular maintenance of the melting furnace	
(iii) Optimisation of the furnace design and the selection of the melting technique	Applicable for new plants. For existing plants, the implementation requires a complete rebuild of the furnace
(iv) Application of combustion control techniques	Applicable to fuel/air and oxy-fuel fired furnaces

Technique	Applicability
(v) Use of increasing levels of cullet, where available and economically and technically viable	Not applicable to the continuous filament glass fibre, high temperature insulation wool and frits sectors
(vi) Use of a waste heat boiler for energy recovery, where technically and economically viable	Applicable to fuel/air and oxy-fuel fired furnaces. The applicability and economic viability of the technique is dictated by the overall efficiency that may be obtained, including the effective use of the steam generated
(vii) Use of batch and cullet preheating, where technically and economically viable	Applicable to fuel/air and oxy-fuel fired furnaces. The applicability is normally restricted to batch compositions with more than 50 % cullet

1.1.3. Materials storage and handling

3. BAT is to prevent, or where that is not practicable, to reduce diffuse dust emissions from the storage and handling of solid materials by using one or a combination of the following techniques:

I. Storage of raw materials

(i) Store bulk powder materials in enclosed silos equipped with a dust abatement system (e.g. fabric filter)

(ii) Store fine materials in enclosed containers or sealed bags

(iii) Store under cover stockpiles of coarse dusty materials

(iv) Use of road cleaning vehicles and water damping techniques

II. Handling of raw materials

Technique	Applicability
(i) For materials which are transported by above ground, use enclosed conveyors to prevent material loss	The techniques are generally applicable
(ii) Where pneumatic conveying is used, apply a sealed system equipped with a filter to clean the transport air before release	
(iii) Moistening of the batch	The use of this technique is limited by the negative consequences on the furnace energy efficiency. Restrictions may apply to some batch formulations, in particular for borosilicate glass production
(iv) Application of a slightly negative pressure within the furnace	Applicable only as an inherent aspect of operation (i.e. melting furnaces for frits production) due to a detrimental impact on furnace energy efficiency
(v) Use of raw materials that do not cause decrepitation phenomena (mainly dolomite and limestone). These phenomena consist of minerals that 'crackle' when exposed to heat, with a consequent potential increase of dust emissions	Applicable within the constraints associated with the availability of raw materials
(vi) Use of an extraction which vents to a filter system in processes where dust is likely to be generated (e.g. bag opening, frits batch mixing, fabric filter dust disposal, cold-top melters)	The techniques are generally applicable
(vii) Use of enclosed screw feeders	
(viii) Enclosure of feed pockets	Generally applicable. Cooling may be necessary to avoid damage to the equipment

4. BAT is to prevent, or where that is not practicable, to reduce diffuse gaseous emissions from the storage and handling of volatile raw materials by using one or a combination of the following techniques:

(i) Use of tank paint with low solar absorbency for bulk storage subject to temperature changes due to solar heating.

(ii) Control of temperature in the storage of volatile raw materials.

(iii) Tank insulation in the storage of volatile raw materials.

(iv) Inventory management

(v) Use of floating roof tanks in the storage of large quantities of volatile petroleum products.

(vi) Use of vapour return transfer systems in the transfer of volatile fluids (e.g. from tank trucks to storage tank).

(vii) Use of bladder roof tanks in the storage of liquid raw materials.

(viii) Use of pressure/vacuum valves in tanks designed to withstand pressure fluctuations.

(ix) Application of a release treatment (e.g. adsorption, absorption, condensation) in the storage of hazardous materials.

(x) Application of subsurface filling in the storage of liquids that tend to foam.

1.1.4. General primary techniques

5. BAT is to reduce energy consumption and emissions to air by carrying out a constant monitoring of the operational parameters and a programmed maintenance of the melting furnace.

Technique	Applicability
The technique consists of a series of monitoring and maintenance operations which can be used individually or in combination appropriate to the type of furnace, with the aim of minimising the ageing effects on the furnace, such as sealing the furnace and burner blocks, keep the maximum insulation, control the stabilised flame conditions, control the fuel/air ratio, etc.	Applicable to regenerative, recuperative, and oxy-fuel fired furnaces. The applicability to other types of furnaces requires an installation-specific assessment

6. BAT is to carry out a careful selection and control of all substances and raw materials entering the melting furnace in order to reduce or prevent emissions to air by using one or a combination of the following techniques.

Technique	Applicability
(i) Use of raw materials and external cullet with low levels of impurities (e.g. metals, chlorides, fluorides)	Applicable within the constraints of the type of glass produced at the installation and the availability of raw materials and fuels
(ii) Use of alternative raw materials (e.g. less volatile)	
(iii) Use of fuels with low metal impurities	

7. BAT is to carry out monitoring of emissions and/or other relevant process parameters on a regular basis, including the following:

Technique	Applicability
(i) Continuous monitoring of critical process parameters to ensure process stability, e.g. temperature, fuel feed and airflow	The techniques are generally applicable
(ii) Regular monitoring of process parameters to prevent/reduce pollution, e.g. O_2 content of the combustion gases to control the fuel/air ratio.	
(iii) Continuous measurements of dust, NO_X and SO_2 emissions or discontinuous measurements at least twice per year, associated with the control of surrogate parameters to ensure that the treatment system is working properly between measurements	
(iv) Continuous or regular periodic measurements of NH_3 emissions, when selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) techniques are applied	The techniques are generally applicable
(v) Continuous or regular periodic measurements of CO emissions when primary techniques or chemical reduction by fuel techniques are applied for NO_X emissions reductions or partial combustion may occur.	
(vi) Regular periodic measurements of emissions of HCl, HF, CO and metals, in particular when raw materials containing such substances are used or partial combustion may occur	The techniques are generally applicable
(vii) Continuous monitoring of surrogate parameters to ensure that the waste gas treatment system is working properly and that the emission levels are maintained between discontinuous measurements. The monitoring of surrogate parameters includes: reagent feed, temperature, water feed, voltage, dust removal, fan speed, etc.	

8. BAT is to operate the waste gas treatment systems during normal operating conditions at optimal capacity and availability in order to prevent or reduce emissions

Applicability

Special procedures can be defined for specific operating conditions, in particular:

(i) during start-up and shutdown operations

(ii) during other special operations which could affect the proper functioning of the systems (e.g. regular and extra-ordinary maintenance work and cleaning operations of the furnace and/or of the waste gas treatment system, or severe production change)

(iii) in the case of insufficient waste gas flow or temperature which prevents the use of the system at full capacity.

9. BAT is to limit carbon monoxide (CO) emissions from the melting furnace, when applying primary techniques or chemical reduction by fuel, for the reduction of NO_X emissions

Technique	Applicability
Primary techniques for the reduction of NO_X emissions are based on combustion modifications (e.g. reduction of air/fuel ratio, staged combustion low-NO_X burners, etc.). Chemical reduction by fuel consists of the addition of hydrocarbon fuel to the waste gas stream to reduce the NO_X formed in the furnace. The increase in CO emissions due to the application of these techniques can be limited by a careful control of the operational parameters	Applicable to conventional air/fuel fired furnaces.

Table 3

BAT-AELs for carbon monoxide emissions from melting furnaces

Parameter	BAT-AEL
Carbon monoxide, expressed as CO	< 100 mg/Nm^3

10. BAT is to limit ammonia (NH_3) emissions, when applying selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) techniques for a high efficiency NO_X emissions reduction

Technique	Applicability
The technique consists of adopting and maintaining suitable operating conditions of the SCR or SNCR waste gas treatment systems, with the aim of limiting emissions of unreacted ammonia	Applicable to melting furnaces fitted with SCR or SNCR

Table 4

BAT-AELs for ammonia emissions, when SCR or SNCR techniques are applied

Parameter	BAT-AELs ([1])
Ammonia, expressed as NH_3	< 5 – 30 mg/Nm^3

([1]) The higher levels are associated with higher inlet NO_X concentrations, higher reduction rates and the ageing of the catalyst.

11. BAT is to reduce boron emissions from the melting furnace, when boron compounds are used in the batch formulation, by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Operation of a filtration system at a suitable temperature for enhancing the separation of boron compounds in the solid state, taking into account that some boric acid species may be present in the flue-gas as gaseous compounds at temperatures below 200 °C, but also as low as 60 °C	The applicability to existing plants may be limited by technical constraints associated with the position and characteristics of the existing filter system
(ii) Use of dry or semi-dry scrubbing in combination with a filtration system	The applicability may be limited by a decreased removal efficiency of other gaseous pollutants (SO_X, HCl, HF) caused by the deposition of boron compounds on the surface of the dry alkaline reagent
(iii) Use of wet scrubbing	The applicability to existing plants may be limited by the need of a specific waste water treatment

([1]) A description of the techniques is given in Sections 1.10.1, 1.10.4 and 1.10.6.

Monitoring

The monitoring of boron emissions should be carried out according to a specific methodology which allows measurement of both solid and gaseous forms and to determine the effective removal of these species from the flue gases.

1.1.5. Emissions to water from glass manufacturing processes

12. BAT is to reduce water consumption by using one or a combination of the following techniques:

Technique	Applicability
(i) Minimisation of spillages and leaks	The technique is generally applicable
(ii) Reuse of cooling and cleaning waters after purging	The technique is generally applicable. Recirculation of scrubbing water is applicable to most scrubbing systems; however, periodic discharge and replacement of the scrubbing medium may be necessary

Technique	Applicability
(iii) Operate a quasi-closed loop water system as far as technically and economically feasible	The applicability of this technique may be limited by the constraints associated with the safety management of the production process. In particular: — open circuit cooling may be used when safety issues require for it (e.g. incidents when large quantities of glass need to be cooled) — water used in some specific process (e.g. downstream activities in the continuous filament glass fibre sector, acid polishing in the domestic and special glass sectors, etc.) may have to be discharged in total or in part to the waste water treatment system

13. BAT is to reduce the emission load of pollutants in the waste water discharges by using one or a combination of the following waste water treatment systems:

Technique	Applicability
(i) Standard pollution control techniques, such as settlement, screening, skimming, neutralisation, filtration, aeration, precipitation, coagulation and flocculation, etc. Standard good practice techniques to control emissions from storage of liquid raw materials and intermediates, such as containments, inspection/testing of tanks, overfill protection, etc.	The techniques are generally applicable
(ii) Biological treatment systems, such as activated sludge, biofiltration to remove/degrade the organic compounds	The applicability is limited to the sectors which use organic substances in the production process (e.g. continuous filament glass fibre and mineral wool sectors)
(iii) Discharge to municipal waste water treatment Plants	Applicable to installations where further reduction of pollutants is necessary
(iv) External reuse of waste waters	The applicability is generally limited to the frits sector (possible reuse in the ceramic industry)

Table 5

BAT-AELs for waste water discharges to surface waters from the manufacture of glass

Parameter [1]	Unit	BAT-AEL [2] (composite sample)
pH	—	6,5 – 9
Total suspended solids	mg/l	< 30
Chemical oxygen demand (COD)	mg/l	< 5 – 130 [3]
Sulphates, expressed as SO_4^{2-}	mg/l	< 1 000
Fluorides, expressed as F^-	mg/l	< 6 [4]
Total hydrocarbons	mg/l	< 15 [5]
Lead, expressed as Pb	mg/l	< 0,05 – 0,3 [6]
Antimony, expressed as Sb	mg/l	< 0,5
Arsenic, expressed as As	mg/l	< 0,3
Barium, expressed as Ba	mg/l	< 3,0

Parameter (1)	Unit	BAT-AEL (2) (composite sample)
Zinc, expressed as Zn	mg/l	< 0,5
Copper, expressed as Cu	mg/l	< 0,3
Chromium, expressed as Cr	mg/l	< 0,3
Cadmium, expressed as Cd	mg/l	< 0,05
Tin, expressed as Sn	mg/l	< 0,5
Nickel, expressed as Ni	mg/l	< 0,5
Ammonia, expressed as NH_4	mg/l	< 10
Boron, expressed as B	mg/l	< 1 – 3
Phenol	mg/l	< 1

(1) The relevance of the pollutants listed in the table depends on the sector of the glass industry and on the different activities carried out at the plant.
(2) The levels refer to a composite sample taken over a time period of 2 hours or 24 hours.
(3) For the continuous filament glass fibre sector, BAT-AEL is < 200 mg/l.
(4) The level refers to treated water coming from activities involving acid polishing.
(5) In general, total hydrocarbons are composed of mineral oils.
(6) The higher level of the range is associated with downstream processes for the production of lead crystal glass.

1.1.6. Waste from the glass manufacturing processes

14. BAT is to reduce the production of solid waste to be disposed of by using one or a combination of the following techniques:

Technique	Applicability
(i) Recycling of waste batch materials, where quality requirements allow for it	The applicability may be limited by the constraints associated with the quality of the final glass product
(ii) Minimising material losses during the storage and handling of raw materials	The technique is generally applicable
(iii) Recycling of internal cullet from rejected production	Generally, not applicable to the continuous filament glass fibre, high temperature insulation wool and frits sectors
(iv) Recycling of dust in the batch formulation where quality requirements allow for it	The applicability may be limited by different factors: — quality requirements of the final glass product — cullet percentage used in the batch formulation — potential carryover phenomena and corrosion of the refractory materials — sulphur balance constraints
(v) Valorisation of solid waste and/or sludge through appropriate use on-site (e.g. sludge from water treatment) or in other industries	Generally applicable to the domestic glass sector (for lead crystal cutting sludge) and to the container glass sector (fine particles of glass mixed with oil). Limited applicability to other glass manufacturing sectors due to unpredictable, contaminated composition, low volumes and economic viability
(vi) Valorisation of end-of-life refractory materials for possible use in other industries	The applicability is limited by the constraints imposed by the refractory manufacturers and potential end-users
(vii) Applying cement bonded briquetting of waste for recycling into hot blast cupola furnaces where quality requirements allow for it	The applicability of cement bonded briquetting of waste is limited to the stone wool sector. A trade-off approach between air emissions and the generation of solid waste stream should be undertaken

1.1.7. Noise from the glass manufacturing processes

15. BAT is to reduce noise emissions by using one or a combination of the following techniques:

(i) Make an environmental noise assessment and formulate a noise management plan as appropriate to the local environment

(ii) Enclose noisy equipment/operation in a separate structure/unit

(iii) Use embankments to screen the source of noise

(iv) Carry out noisy outdoor activities during the day

(v) Use noise protection walls or natural barriers (trees, bushes) between the installation and the protected area, on the basis of local conditions.

1.2. *BAT conclusions for container glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all container glass manufacturing installations.

1.2.1. Dust emissions from melting furnaces

16. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying a flue-gas cleaning system such as an electrostatic precipitator or a bag filter.

Technique ([1])	Applicability
The flue-gas cleaning systems consist of end-of-pipe techniques based on the filtration of all materials that are solid at the point of measurement	The technique is generally applicable

([1]) A description of filtration systems (i.e. electrostatic precipitator, bag filter) is given in Section 1.10.1.

Table 6

BAT-AELs for dust emissions from the melting furnace in the container glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Dust	< 10 – 20	< 0,015 – 0,06

([1]) The conversion factors of $1,5 \times 10^{-3}$ and 3×10^{-3} have been used for the determination of the lower and higher value of the range respectively.

1.2.2. Nitrogen oxides (NO_X) from melting furnaces

17. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

I. primary techniques, such as:

Technique ([1])	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)

Technique [1]	Applicability
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Special furnace design	The applicability is limited to batch formulations that contain high levels of external cullet (> 70 %). The application requires a complete rebuild of the melting furnace. The shape of the furnace (long and narrow) may pose space restrictions
(iii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iv) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

II. secondary techniques, such as:

Technique [1]	Applicability
(i) Selective catalytic reduction (SCR)	The application may require an upgrade of the dust abatement system in order to guarantee a dust concentration of below 10 – 15 mg/Nm^3 and a desulphurisation system for the removal of SO_X emissions. Due to the optimum operating temperature window, the applicability is limited to the use of electrostatic precipitators. In general, the technique is not used with a bag filter system because the low operating temperature, in the range of 180 – 200 °C, would require reheating of the waste gases. The implementation of the technique may require significant space availability
(ii) Selective non-catalytic reduction(SNCR)	The technique is applicable to recuperative furnaces. Very limited applicability to conventional regenerative furnaces, where the correct temperature window is difficult to access or does not allow a good mixing of the flue-gases with the reagent. It may be applicable to new regenerative furnaces equipped with split regenerators; however, the temperature window is difficult to maintain due to the reversal of fire between the chambers that causes a cyclical temperature change

[1] A description of the techniques is given in Section 1.10.2.

Table 7

BAT-AELs for NO_X emissions from the melting furnace in the container glass sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Combustion modifications, special furnace designs (2) (3)	500 – 800	0,75 – 1,2
	Electric melting	< 100	< 0,3
	Oxy-fuel melting (4)	Not applicable	< 0,5 – 0,8
	Secondary techniques	< 500	< 0,75

(1) The conversion factor reported in Table 2 for general cases ($1,5 \times 10^{-3}$) has been applied, with the exception of electric melting (specific cases: 3×10^{-3}).
(2) The lower value refers to the use of special furnace designs, where applicable.
(3) These values should be reconsidered in the occasion of a normal or complete rebuild of the melting furnace.
(4) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

18. When nitrates are used in the batch formulation and/or special oxidising combustion conditions are required in the melting furnace for ensuring the quality of the final product, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with primary or secondary techniques

The BAT-AELs are set out in Table 7.

If nitrates are used in the batch formulation for short campaigns or for melting furnaces with a capacity of < 100 t/day, the BAT-AEL is set out in Table 8.

Technique (1)	Applicability
Primary techniques: — Minimising the use of nitrates in the batch formulation The use of nitrates is applied for very high quality products (i.e. flacconage, perfume bottles and cosmetic containers). Effective alternative materials are sulphates, arsenic oxides, cerium oxide. The application of process modifications (e.g. special oxidising combustion conditions) represents an alternative to the use of nitrates	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

(1) A description of the techniques is given in Section 1.10.2.

Table 8

BAT-AEL for NO_X emissions from the melting furnace in the container glass sector, when nitrates are used in the batch formulation and/or special oxidising combustion conditions in cases of short campaigns or for melting furnaces with a capacity of < 100 t/day

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Primary techniques	< 1 000	< 3

(1) The conversion factor reported in Table 2 for specific cases (3×10^{-3}) has been applied.

1.2.3. Sulphur oxides (SO_X) from melting furnaces

19. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(ii) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of the sulphur content in the batch formulation is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust). The effective reduction of SO_X emissions depends on the retention of sulphur compounds in the glass which may vary significantly depending on the glass type
(iii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

(1) A description of the techniques is given in Section 1.10.3.

Table 9

BAT-AELs for SO_X emissions from the melting furnace in the container glass sector

Parameter	Fuel	BAT-AEL (1) (2)	
		mg/Nm^3	kg/tonne melted glass (3)
SO_X expressed as SO_2	Natural gas	< 200 – 500	< 0,3 – 0,75
	Fuel oil (4)	< 500 – 1 200	< 0,75 – 1,8

(1) For special types of coloured glasses (e.g. reduced green glasses), concerns related to the achievable emission levels may require investigating the sulphur balance. Values reported in the table may be difficult to achieve in combination with filter dust recycling and the rate of recycling of external cullet.
(2) The lower levels are associated with conditions where the reduction of SO_X is a high priority over a lower production of solid waste corresponding to the sulphate-rich filter dust.
(3) The conversion factor reported in Table 2 for general cases ($1,5 \times 10^{-3}$) has been applied.
(4) The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.

1.2.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

20. BAT is to reduce HCl and HF emissions from the melting furnace (possibly combined with flue-gases from hot-end coating activities) by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the type of glass produced at the installation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.4.

Table 10

BAT-AELs for HCl and HF emissions from the melting furnace in the container glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2)	< 10 – 20	< 0,02 – 0,03
Hydrogen fluoride, expressed as HF	< 1 – 5	< 0,001 – 0,008

(1) The conversion factor for general cases, reported in Table 2 ($1,5 \times 10^{-3}$) has been applied.
(2) The higher levels are associated with the simultaneous treatment of flue-gases from hot-end coating operations.

1.2.5. Metals from melting furnaces

21. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of the raw materials
(ii) Minimising the use of metal compounds in the batch formulation, where colouring and decolourising of glass is needed, subject to consumer glass quality requirements	
(iii) Applying a filtration system (bag filter or electrostatic precipitator)	The techniques are generally applicable
(iv) Applying a dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 11

BAT-AELs for metal emissions from the melting furnace in the container glass sector

Parameter	BAT-AEL (1) (2) (3)	
	mg/Nm^3	kg/tonne melted glass (4)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1 (5)	$< 0,3 – 1,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	$< 1,5 – 7,5 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The lower levels are BAT-AELs when metal compounds are not intentionally used in the batch formulation.
(3) The upper levels are associated with the use of metals for colouring or decolourising the glass, or when the flue-gases from the hot-end coating operations are treated together with the melting furnace emissions.
(4) The conversion factor for general cases, reported in Table 2 ($1,5 \times 10^{-3}$) has been applied.
(5) In specific cases, when high quality flint glass is produced requiring higher amounts of selenium for decolourising (depending on the raw materials), higher values are reported, up to 3 mg/Nm^3.

1.2.6. Emissions from downstream processes

22. When tin, organotin or titanium compounds are used for hot-end coating operations, BAT is to reduce emissions by using one or a combination of the following techniques:

Technique	Applicability
(i) Minimising the losses of the coating product by ensuring a good sealing of the application system and applying an effective extracting hood. A good construction and sealing of the application system is essential for minimising losses of unreacted product into the air	The technique is generally applicable

Technique	Applicability
(ii) Combining the flue-gas from the coating operations with the waste gas from the melting furnace or with the combustion air of the furnace, when a secondary treatment system is applied (filter and dry or semi-dry scrubber). Based on the chemical compatibility, the waste gases from the coating operations may be combined with other flue-gases before treatment. These two options may be applied: — combination with the flue gases from the melting furnace, upstream of a secondary abatement system (dry or semi-dry scrubbing plus filtration system) — combination with combustion air before entering the regenerator, followed by secondary abatement treatment of the waste gases generated during the melting process (dry or semi-dry scrubbing + filtration system)	The combination with flue gases from the melting furnace is generally applicable. The combination with combustion air may be affected by technical constraints due to some potential effects on the glass chemistry and on the regenerator materials
(iii) Applying a secondary technique, e.g. wet scrubbing, dry scrubbing plus filtration ([1])	The techniques are generally applicable

([1]) A description of the techniques is given in Sections 1.10.4 and 1.10.7.

Table 12

BAT-AELs for air emissions from hot-end coating activities in the container glass sector when the flue-gases from downstream operations are treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	< 10
Titanium compounds expressed as Ti	< 5
Tin compounds, including organotin, expressed as Sn	< 5
Hydrogen chloride, expressed as HCl	< 30

23. When SO_3 is used for surface treatment operations, BAT is to reduce SO_X emissions by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the product losses by ensuring a good sealing of the application system A good construction and maintenance of the application system is essential for minimising the losses of unreacted product into the air	The techniques are generally applicable
(ii) Applying a secondary technique, e.g. wet scrubbing	

([1]) A description of the techniques is given in Section 1.10.6.

Table 13

BAT-AEL for SO_X emissions from downstream activities when SO_3 is used for surface treatment operations in the container glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
SO_x, expressed as SO_2	< 100 – 200

1.3. *BAT conclusions for flat glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all flat glass manufacturing installations.

1.3.1. Dust emissions from melting furnaces

24. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying an electrostatic precipitator or a bag filter system

A description of the techniques is given in Section 1.10.1.

Table 14

BAT-AELs for dust emissions from the melting furnace in the flat glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Dust	< 10 – 20	< 0,025 – 0,05

([1]) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.

1.3.2. Nitrogen oxides (NO_X) from melting furnaces

25. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

I. primary techniques, such as:

Technique ([1])	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	The applicability is restricted to small capacity furnaces for the production of specialty flat glass and under installation-specific circumstances, due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State

Technique [1]	Applicability
(ii) Fenix process Based on the combination of a number of primary techniques for the optimisation of the combustion of cross-fired regenerative float furnaces. The main features are: — reduction of excess air — suppression of hotspots and homogenisation of the flame temperatures — controlled mixing of the fuel and combustion air	The applicability is limited to cross-fired regenerative furnaces. Applicable to new furnaces. For existing furnaces, the technique requires being directly integrated during the design and construction of the furnace, at a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

II. secondary techniques, such as:

Technique [1]	Applicability
(i) Chemical reduction by fuel	Applicable to regenerative furnaces. The applicability is limited by an increased fuel consumption and consequent environmental and economic impact
(ii) Selective catalytic reduction (SCR)	The application may require an upgrade of the dust abatement system in order to guarantee a dust concentration of below 10 – 15 mg/Nm^3 and a desulphurisation system for the removal of SO_X emissions Due to the optimum operating temperature window, the applicability is limited to the use of electrostatic precipitators. In general, the technique is not used with a bag filter system because the low operating temperature, in the range of 180 – 200 °C, would require reheating of the waste gases. The implementation of the technique may require significant space availability

[1] A description of the techniques is given in Section 1.10.2.

Table 15

BAT-AELs for NO_X emissions from the melting furnace in the flat glass sector

Parameter	BAT	BAT-AEL [1]	
		mg/Nm^3	kg/tonne melted glass [2]
NO_X expressed as NO_2	Combustion modifications, Fenix process [3]	700 – 800	1,75 – 2,0
	Oxy-fuel melting [4]	Not applicable	< 1,25 – 2,0
	Secondary techniques [5]	400 – 700	1,0 – 1,75

[1] Higher emission levels are expected when nitrates are used occasionally for the production of special glasses.
[2] The conversion factor reported in Table 2 (2,5 × 10^{-3}) has been applied.
[3] The lower levels of the range are associated with the application of the Fenix process.
[4] The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).
[5] The higher levels of the range are associated with existing plants until a normal or complete rebuild of the melting furnace. The lower levels are associated with newer/retrofitted plants.

26. When nitrates are used in the batch formulation, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with primary or secondary techniques. If secondary techniques are applied, the BAT-AELs reported in Table 15 are applicable.

If nitrates are used in the batch formulation for the production of special glasses in a limited number of short campaigns, the BAT-AELs are set out in Table 16.

Technique [1]	Applicability
Primary techniques: minimising the use of nitrates in the batch formulation The use of nitrates is applied for special productions (i.e. coloured glass). Effective alternative materials are sulphates, arsenic oxides, cerium oxide	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

[1] A description of the technique is given in Section 1.10.2.

Table 16

BAT-AEL for NO_X emissions from the melting furnace in the flat glass sector, when nitrates are used in the batch formulation for the production of special glasses in a limited number of short campaigns

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass [1]
NO_X expressed as NO_2	Primary techniques	< 1 200	< 3

[1] The conversion factor reported in Table 2 for specific cases ($2,5 \times 10^{-3}$) has been applied

1.3.3. Sulphur oxides (SO_X) from melting furnaces

27. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(ii) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of the sulphur content in the batch formulation is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust)
(iii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

[1] A description of the techniques is given in Section 1.10.3.

Table 17

BAT-AELs for SO_X emissions from the melting furnace in the flat glass sector

Parameter	Fuel	BAT-AEL [1]	
		mg/Nm^3	kg/tonne melted glass [2]
SO_x expressedas SO_2	Natural gas	< 300 – 500	< 0,75 – 1,25
	Fuel oil [3] [4]	500 – 1 300	1,25 – 3,25

[1] The lower levels are associated with conditions where the reduction of SO_X has a high priority over a lower production of solid waste corresponding to the sulphate-rich filter dust.
[2] The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.
[3] The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.
[4] For large flat glass furnaces, concerns related to the achievable emission levels may require investigating the sulphur balance. Values reported in the table may be difficult to achieve in combination with filter dust recycling.

1.3.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

28. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the type of glass produced at the installation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.4.

Table 18

BAT-AELs for HCl and HF emissions from the melting furnace in the flat glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2)	< 10 – 25	< 0,025 – 0,0625
Hydrogen fluoride, expressed as HF	< 1 – 4	< 0,0025 – 0,010

(1) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.
(2) The higher levels of the range are associated with the recycling of filter dust in the batch formulation

1.3.5. Metals from melting furnaces

29. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of the raw materials.
(ii) Applying a filtration system	The technique is generally applicable
(iii) Applying a dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 19

BAT-AELs for metal emissions from the melting furnace in the flat glass sector, with the exception of selenium coloured glasses

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1	$< 0,5 – 2,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	$< 2,5 – 12,5 \times 10^{-3}$

(1) The ranges refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied

30. When selenium compounds are used for colouring the glass, BAT is to reduce selenium emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the evaporation of selenium from the batch composition by selecting raw materials with a higher retention efficiency in the glass and reduced volatilisation	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of the raw materials
(ii) Applying a filtration system	The technique is generally applicable
(iii) Applying a dry or semi-dry scrubbing, in combination with a filtration system	

([1]) A description of the techniques is given in Section 1.10.5.

Table 20

BAT-AELs for selenium emissions from the melting furnace in the flat glass sector for the production of coloured glass

Parameter	BAT-AEL ([1]) ([2])	
	mg/Nm^3	kg/tonne melted glass ([3])
Selenium compounds, expressed as Se	1 – 3	$2,5 – 7,5 \times 10^{-3}$

([1]) The values refer to the sum of selenium present in the flue-gases in both solid and gaseous phases.
([2]) The lower levels correspond to conditions where the reduction of Se emissions is a priority over a lower production of solid waste from filter dust. In this case, a high stoichiometric ratio (reagent/pollutant) is applied and a significant solid waste stream is generated.
([3]) The conversion factor reported in Table 2 ($2,5 \times 10^{-3}$) has been applied.

1.3.6. Emissions from downstream processes

31. BAT is to reduce emissions to air from the downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the losses of coating products applied to the flat glass by ensuring a good sealing of the application system	The techniques are generally applicable
(ii) Minimising the losses of SO_2 from the annealing lehr, by operating the control system in an optimum manner	
(iii) Combining the SO_2 emissions from the lehr with the waste gas from the melting furnace, when technically feasible, and where a secondary treatment system is applied (filter and dry or semi-dry scrubber)	
(iv) Applying a secondary technique, e.g. wet scrubbing, or dry scrubbing and filtration	The techniques are generally applicable. The selection of the technique and its performance will depend on the inlet waste gas composition

([1]) A description of the secondary treatment systems is given in Sections 1.10.3 and 1.10.6.

Table 21

BAT-AELs for air emissions from downstream processes in the flat glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	< 15 – 20

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen chloride, expressed as HCl	< 10
Hydrogen fluoride, expressed as HF	< 1 – 5
SO_X, expressed as SO_2	< 200
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5

1.4. *BAT conclusions for continuous filament glass fibre manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all continuous filament glass fibre manufacturing installations.

1.4.1. Dust emissions from melting furnaces

The BAT-AELs reported in this section for dust refer to all materials that are solid at the point of measurement, including solid boron compounds. Gaseous boron compounds at the point of measurement are not included.

32. BAT is to reduce dust emissions from the waste gases of the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Reduction of the volatile components by raw material modifications The formulation of batch compositions without boron compounds or with low levels of boron is a primary measure for reducing dust emissions which are mainly generated by volatilisation phenomena. Boron is the main constituent of particulate matter emitted from the melting furnace	The application of the technique is limited by proprietary issues, since the boron-free or low-boron batch formulations are covered by a patent
(ii) Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable. The maximum environmental benefits are achieved for applications on new plants where the positioning and characteristics of the filter may be decided without restrictions
(iii) Wet scrubbing system	The application to existing plants may be limited by technical constraints; i.e. need for a specific waste water treatment plant

([1]) A description of the secondary treatment systems is given in Sections 1.10.1 and 1.10.7.

Table 22

BAT-AELs for dust emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT-AEL ([1])	
	mg/Nm^3	kg/tonne melted glass ([2])
Dust	< 10 – 20	< 0,045 – 0,09

([1]) Values at levels of < 30 mg/Nm^3 (< 0,14 kg/tonne melted glass) have been reported for boron-free formulations, with the application of primary techniques.
([2]) The conversion factor reported in Table 2 ($4{,}5 \times 10^{-3}$) has been applied.

1.4.2. Nitrogen oxides (NO_X) from melting furnaces

33. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable to air/fuel conventional furnaces within the constraints of the furnace energy efficiency and higher fuel demand. Most furnaces are already of the recuperative type.
(c) Staged combustion: (d) Air staging (e) Fuel staging	Fuel staging is applicable to most air/fuel, oxy-fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

Table 23

BAT-AELs for NO_X emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass
NO_X expressed as NO_2	Combustion modifications	< 600 – 1 000	< 2,7 – 4,5 [1]
	Oxy-fuel melting [2]	Not applicable	< 0,5 – 1,5

[1] The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.
[2] The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

1.4.3. Sulphur oxides (SO_X) from melting furnaces

34. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The technique is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust), which needs to be disposed of

Technique (1)	Applicability
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable. The presence of high concentrations of boron compounds in the flue-gases may limit the abatement efficiency of the reagent used in the dry or semi-dry scrubbing systems
(iv) Use of wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant

(1) A description of the techniques is given in Sections 1.10.3 and 1.10.6.

Table 24

BAT-AELs for SO_X emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	Fuel	BAT-AEL (1)	
		mg/Nm^3	kg/tonne melted glass (2)
SO_x expressed as SO_2	Natural gas (3)	< 200 – 800	< 0,9 – 3,6
	Fuel oil (4) (5)	< 500 – 1 000	< 2,25 – 4,5

(1) The higher levels of the range are associated with the use of sulphates in the batch formulation for refining the glass.
(2) The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.
(3) For oxy-fuel furnaces with the application of wet scrubbing, the BAT-AEL is reported to be < 0,1 kg/tonne melted glass of SO_X, expressed as SO_2.
(4) The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.
(5) The lower levels correspond to conditions where the reduction of SO_X is a priority over a lower production of solid waste corresponding to the sulphate-rich filter dust. In this case, the lower levels are associated with the use of a bag filter.

1.4.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

35. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable within the constraints of the batch formulation and the availability of raw materials
(ii) Minimisation of the fluorine content in the batch formulation The minimisation of fluorine emissions from the melting process may be achieved as follows: — minimising/reducing the quantity of fluorine compounds (e.g. fluorspar) used in the batch formulation to the minimum commensurate with the quality of the final product. Fluorine compounds are used to optimise the melting process, help fiberisation and minimise filament breakage — substituting fluorine compounds with alternative materials (e.g. sulphates)	The substitution of fluorine compounds with alternative materials is limited by quality requirements of the product
(iii) dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iv) wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant.

(1) A description of the techniques is given in Sections 1.10.4 and 1.10.6.

Table 25

BAT-AELs for HCl and HF emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl	< 10	< 0,05
Hydrogen fluoride, expressed as HF (2)	< 5 – 15	< 0,02 – 0,07

(1) The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.
(2) The higher levels of the range are associated with the use of fluorine compounds in the batch formulation.

1.4.5. Metals from melting furnaces

36. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The technique is generally applicable within the constraints of the availability of raw materials
(ii) Applying a dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iii) Applying wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant.

(1) A description of the techniques is given in Sections 1.10.5 and 1.10.6.

Table 26

BAT-AELs for metal emissions from the melting furnace in the continuous filament glass fibre sector

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1	$< 0,9 – 4,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 3	$< 4,5 – 13,5 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factor reported in Table 2 ($4,5 \times 10^{-3}$) has been applied.

1.4.6. Emissions from downstream processes

37. BAT is to reduce emissions from downstream processes by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Wet scrubbing systems	The techniques are generally applicable for the treatment of waste gases from the forming process (application of the coating to the fibres) or secondary processes which involve the use of binder that must be cured or dried
(ii) Wet electrostatic precipitator	
(iii) Filtration system (bag filter)	The technique is generally applicable for the treatment of waste gases from cutting and milling operations of the products

(1) A description of the techniques is given in Sections 1.10.7 and 1.10.8.

Table 27

BAT-AELs for air emissions from downstream processes in the continuous filament glass fibre sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Emissions from forming and coating	
Dust	< 5 – 20
Formaldehyde	< 10
Ammonia	< 30
Total volatile organic compounds, expressed as C	< 20
Emissions from cutting and milling	
Dust	< 5 – 20

1.5. *BAT conclusions for domestic glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all domestic glass manufacturing installations.

1.5.1. Dust emissions from melting furnaces

38. BAT is to reduce dust emissions from the waste gases of the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Reduction of the volatile components by raw material modifications. The formulation of the batch composition may contain very volatile components (e.g. boron, fluorides) which significantly contribute to the formation of dust emissions from the melting furnace	The technique is generally applicable within the constraints of the type of glass produced and the availability of substitute raw materials
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations The implementation requires a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications made at the time of a complete furnace rebuild
(iv) Filtration system: electrostatic precipitator or bag filter	The techniques are generally applicable
(v) Wet scrubbing system	The applicability is limited to specific cases, in particular to electric melting furnaces, where flue-gas volumes and dust emissions are generally low and related to carryover of the batch formulation

([1]) A description of the techniques is given in Sections 1.10.5 and 1.10.7.

Table 28

BAT-AELs for dust emissions from the melting furnace in the domestic glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Dust	< 10 – 20 (2)	< 0,03 – 0,06
	< 1 – 10 (3)	< 0,003 – 0,03

(1) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case by case conversion factor may have to be applied for specific productions.
(2) Considerations concerning the economic viability for achieving the BAT-AELs in the case of furnaces with a capacity of < 80 t/d, producing soda-lime glass, are reported.
(3) This BAT-AEL applies to batch formulations containing significant amounts of constituents meeting the criteria as dangerous substances, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council.

1.5.2. Nitrogen oxides (NO_X) from melting furnaces

39. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: (f) Air staging (g) Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Special furnace design	The applicability is limited to batch formulations that contain high levels of external cullet (> 70 %). The application requires a complete rebuild of the melting furnace. The shape of the furnace (long and narrow) may pose space restrictions

Technique (1)	Applicability
(iii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iv) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

(1) A description of the techniques is given in Section 1.10.2.

Table 29

BAT-AELs for NO_X emissions from the melting furnace in the domestic glass sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_x expressed as NO_2	Combustion modifications, special furnace designs	< 500 – 1 000	< 1,25 – 2,5
	Electric melting	< 100	< 0,3
	Oxy-fuel melting (2)	Not applicable	< 0,5 – 1,5

(1) A conversion factor of $2,5 \times 10^{-3}$ has been applied for combustion modifications and special furnace designs and a conversion factor of 3×10^{-3} has been applied for electric melting (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.
(2) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

40. When nitrates are used in the batch formulation, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with primary or secondary techniques.

The BAT-AELs are set out in Table 29.

If nitrates are used in the batch formulation for a limited number of short campaigns or for melting furnaces with a capacity < 100 t/day producing special types of soda-lime glasses (clear/ultra-clear glass or coloured glass using selenium) and other special glasses (i.e. borosilicate, glass ceramics, opal glass, crystal and lead crystal), the BAT-AELs are set out in Table 30.

Technique (1)	Applicability
Primary techniques:	
— Minimising the use of nitrates in the batch formulation The use of nitrates is applied for very high quality products, where a very colourless (clear) glass is required or special glasses are produced. Effective alternative materials are sulphates, arsenic oxides, cerium oxide	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

(1) A description of the technique is given in Section 1.10.2.

Table 30

BAT-AELs for NO_X emissions from the melting furnace in the domestic glass sector, when nitrates are used in the batch formulation for a limited number of short campaigns or for melting furnaces with a capacity < 100 t/day producing special types of soda-lime glasses (clear/ultra-clear glass or coloured glass using selenium) and other special glasses (i.e. borosilicate, glass ceramics, opal glass, crystal and lead crystal

Parameter	Type of furnace	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass
NO_X expressed as NO_2	Fuel/air conventional furnaces	< 500 – 1 500	< 1,25 – 3,75 ([1])
	Electric melting	< 300 – 500	< 8 – 10

([1]) The conversion factor reported in Table 2 for soda-lime glass ($2,5 \times 10^{-3}$) has been applied.

1.5.3. Sulphur oxides (SO_X) from melting furnaces

41. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of the sulphur content in the batch formulation is generally applicable within the constraints of quality requirements of the final glass product. The application of sulphur balance optimisation requires a trade-off approach between the removal of SO_X emissions and the management of the solid waste (filter dust)
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

([1]) A description of the techniques is given in Section 1.10.3.

Table 31

BAT-AELs for SO_X emissions from the melting furnace in the domestic glass sector

Parameter	Fuel/melting technique	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass ([1])
SO_x expressed as SO_2	Natural gas	< 200 – 300	< 0,5 – 0,75
	Fuel oil ([2])	< 1 000	< 2,5
	Electric melting	< 100	< 0,25

([1]) A conversion factor of $2,5 \times 10^{-3}$ has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.
([2]) The levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.

1.5.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

42. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the batch formulation for the type of glass produced at the installation and the availability of raw materials

Technique (1)	Applicability
(ii) Minimisation of the fluorine content in the batch formulation and optimisation of the fluorine mass balance The minimisation of fluorine emissions from the melting process may be achieved by minimising/reducing the quantity of fluorine compounds (e.g. fluorspar) used in the batch formulation to the minimum commensurate with the quality of the final product. Fluorine compounds are added to the batch formulation to give an opaque or cloudy appearance to the glass	The technique is generally applicable within the constraints of the quality requirements for the final product
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iv) Wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant. High costs, waste water treatment aspects, including restrictions in the recycle of sludge or solid residues from the water treatment, may limit the applicability of this technique

(1) A description of the techniques is given in Sections 1.10.4 and 1.10.6.

Table 32

BAT-AELs for HCl and HF emissions from the melting furnace in the domestic glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2) (3)	< 10 – 20	< 0,03 – 0,06
Hydrogen fluoride, expressed as HF (4)	< 1 – 5	< 0,003 – 0,015

(1) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.
(2) The lower levels are associated with the use of electric melting.
(3) In cases where KCl or NaCl are used as a refining agents, the BAT-AEL is < 30 mg/Nm^3 or < 0,09 kg/tonne melted glass.
(4) The lower levels are associated with the use of electric melting. The higher levels are associated with the production of opal glass, the recycling of filter dust or where high levels of external cullet are used in the batch formulation.

1.5.5. Metals from melting furnaces

43. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of raw materials
(ii) Minimising the use of metal compounds in the batch formulation, through a suitable selection of the raw materials where colouring and decolourising of glass is needed or where specific characteristics are conferred to the glass	For the production of crystal and lead crystal glasses the minimisation of metal compounds in the batch formulation is restricted by the limits defined in Directive 69/493/EEC which classifies the chemical composition of the final glass products.
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.5.

Table 33

BAT-AELs for metal emissions from the melting furnace in the domestic glass sector with the exception of glasses where selenium is used for decolourising

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1	$< 0,6 – 3 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	$< 3 – 15 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.

44. When selenium compounds are used for decolourising the glass, BAT is to reduce selenium emissions from the melting furnace by using one or a combination of the following techniques

Technique (1)	Applicability
(i) Minimising the use of selenium compounds in the batch formulation, through a suitable selection of the raw materials	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

(1) A description of the techniques is given in Section 1.10.5.

Table 34

BAT-AELs for selenium emissions from the melting furnace in the domestic glass sector when selenium compounds are used for decolourising the glass

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Selenium compounds, as Se	< 1	$< 3 \times 10^{-3}$

(1) The values refer to the sum of selenium present in the flue-gases in both solid and gaseous phases.
(2) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.

45. When lead compounds are used for the manufacturing of lead crystal glass, BAT is to reduce lead emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(ii) Bag filter	The technique is generally applicable
(iii) Electrostatic precipitator	
(iv) Dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the technique is given in Sections 1.10.1 and 1.10.5.

Table 35

BAT-AELs for lead emissions from the melting furnace in the domestic glass sector when lead compounds are used for manufacturing lead crystal glass

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Lead compounds, expressed as Pb	< 0,5 – 1	$< 1 - 3 \times 10^{-3}$

(1) The values refer to the sum of lead present in the flue-gases in both solid and gaseous phases.
(2) A conversion factor of 3×10^{-3} has been applied (see Table 2). However, a case-by-case conversion factor may have to be applied for specific productions.

1.5.6. Emissions from downstream processes

46. For downstream dusty processes, BAT is to reduce emissions of dust and metals by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Performing dusty operations (e.g. cutting, grinding, polishing) under liquid	The techniques are generally applicable
(ii) Applying a bag filter system	

(1) A description of the techniques is given in Section 1.10.8.

Table 36

BAT-AELs for air emissions from dusty downstream processes in the domestic glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	< 1 – 10
Σ (As, Co, Ni, Cd, Se, Cr_{VI}) (1)	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn) (1)	< 1 – 5
Lead compounds, expressed as Pb (2)	< 1 – 1,5

(1) The levels refer to the sum of metals present in the waste gas.
(2) The levels refer to downstream operations on lead crystal glass.

47. For acid polishing processes, BAT is to reduce HF emissions by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimising the losses of polishing product by ensuring a good sealing of the application system	The techniques are generally applicable
(ii) Applying a secondary technique, e.g. wet scrubbing.	

(1) A description of the techniques is given in Section 1.10.6.

Table 37

BAT-AELs for HF emissions from acid polishing processes in the domestic glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen fluoride, expressed as HF	< 5

1.6. *BAT conclusions for special glass manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all special glass manufacturing installations.

1.6.1. Dust emissions from melting furnaces

48. BAT is to reduce dust emissions from the waste gases of the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Reduction of the volatile components by raw material modifications The formulation of the batch composition may contain very volatile components (e.g. boron, fluorides) which represent the main constituents of dust emitted from the melting furnace	The technique is generally applicable within the constraints of the quality of the glass produced
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day) Not applicable for productions requiring large pull variations The implementation requires a complete furnace rebuild
(iii) Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable

([1]) A description of the techniques is given in Section 1.10.1.

Table 38

BAT-AELs for dust emissions from the melting furnace in the special glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Dust	< 10 – 20	< 0,03 – 0,13
	< 1 – 10 ([2])	< 0,003 – 0,065

([1]) The conversions factors of 2,5 × 10^{-3} and 6,5 × 10^{-3} have been used for the determination of the lower and upper value of the BAT-AELs range (see Table 2), with some values being approximated. However, a-case-by-case conversion factor needs to be applied, depending on the type of glass produced (see Table 2).

([2]) The BAT-AELs apply to batch formulations containing significant amounts of constituents meeting the criteria as dangerous substances, in accordance with Regulation (EC) No 1272/2008.

1.6.2. Nitrogen oxides (NO_X) from melting furnaces

49. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

I. primary techniques, such as:

Technique ([1])	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to the technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

([1]) A description of the techniques is given in Section 1.10.2.

II. secondary techniques, such as:

Technique ([1])	Applicability
(i) Selective catalytic reduction (SCR)	The application may require an upgrade of the dust abatement system in order to guarantee a dust concentration of below 10 – 15 mg/Nm^3 and a desulphurisation system for the removal of SO_X emissions Due to the optimum operating temperature window, the applicability is limited to the use of electrostatic precipitators. In general, the technique is not used with a bag filter system because the low operating temperature, in the range of 180 – 200 °C, would require reheating of the waste gases. The implementation of the technique may require significant space availability

Technique (1)	Applicability
(ii) Selective non-catalytic reduction (SNCR)	Very limited applicability to conventional regenerative furnaces, where the correct temperature window is difficult to access or does not allow a good mixing of the flue-gases with the reagent It may be applicable to new regenerative furnaces equipped with split regenerators; however, the temperature window is difficult to maintain due to the reversal of fire between the chambers that causes a cyclical temperature change

(1) A description of the techniques is given in Section 1.10.2.

Table 39

BAT-AELs for NO_X emissions from the melting furnace in the special glass sector

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Combustion modifications	600 – 800	1,5 – 3,2
	Electric melting	< 100	< 0,25 – 0,4
	Oxy-fuel melting (2) (3)	Not applicable	< 1 – 3
	Secondary techniques	< 500	< 1 – 3

(1) The conversion factors of 2,5 × 10^{-3} and 4 × 10^{-3} have been used for the determination of the lower and upper value of the BAT-AEL range (see Table 2), with some values being approximated. However, a case-by-case conversion factor needs to be applied based on the type of production (see Table 2).
(2) The higher values are related to a special production of borosilicate glass tubes for pharmaceutical use.
(3) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

50. When nitrates are used in the batch formulation, BAT is to reduce NO_X emissions by minimising the use of these raw materials, in combination with either primary or secondary techniques

Technique (1)	Applicability
Primary techniques — minimising the use of nitrates in the batch formulation The use of nitrates is applied for very high quality products, where special characteristics of the glass are required. Effective alternative materials are sulphates, arsenic oxides, cerium oxide	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials

(1) A description of the technique is given in Section 1.10.2.

Table 40

BAT-AELs for NO_X emissions from the melting furnace in the special glass sector when nitrates are used in the batch formulation

Parameter	BAT	BAT-AEL (1)	
		mg/Nm^3	kg/tonne melted glass (2)
NO_X expressed as NO_2	Minimisation of nitrate input in the batch formulation combined with primary or secondary techniques	< 500 – 1 000	< 1 – 6

(1) The lower levels are associated with the use of electric melting.
(2) The conversion factors of 2,5 × 10^{-3} and 6,5 × 10^{-3} have been used for the determination of the lower and upper value of the BAT-AEL range respectively, with values being approximated. A case-by-case conversion factor may have to be applied based on the type of production (see Table 2).

1.6.3. Sulphur oxides (SO_X) from melting furnaces

51. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The technique is generally applicable within the constraints of quality requirements of the final glass product
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

[1] A description of the techniques is given in Section 1.10.3.

Table 41

BAT-AELs for SO_X emissions from the melting furnace in the special glass sector

Parameter	Fuel/melting technique	BAT-AEL [1]	
		mg/Nm^3	kg/tonne melted glass [2]
SO_X expressed as SO_2	Natural gas, electric melting [3]	< 30 – 200	< 0,08 – 0,5
	Fuel oil [4]	500 – 800	1,25 – 2

[1] The ranges take into account the variable sulphur balances associated with the type of glass produced.
[2] The conversion factor of $2,5 \times 10^{-3}$ (see Table 2) has been used. However, a case-by-case conversion factor may have to be applied based on the type of production.
[3] The lower levels are associated with the use of electric melting and batch formulations without sulphates.
[4] The associated emission levels are related to the use of 1 % sulphur fuel oil in combination with secondary abatement techniques.

1.6.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

52. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The applicability may be limited by the constraints of the batch formulation for the type of glass produced at the installation and the availability of raw materials
(ii) Minimisation of the fluorine and/or chlorine compounds in the batch formulation and optimisation of the fluorine and/or chlorine mass balance Fluorine compounds are used to confer particular characteristics to special glasses (i.e. opaque lighting glass, optical glass). Chlorine compounds may be used as fining agents for borosilicate glass production	The technique is generally applicable within the constraints of the quality requirements for the final product.
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

[1] A description of the techniques is given in Section 1.10.4.

Table 42

BAT-AELs for HCl and HF emissions from the melting furnace in the special glass sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl (2)	< 10 – 20	< 0,03 – 0,05
Hydrogen fluoride, expressed as HF	< 1 – 5	< 0,003 – 0,04 (3)

(1) The conversion factor of 2,5 × 10^{-3} (see Table 2) has been used; with some values being approximated. A case-by-case conversion factor may have to be applied based on the type of production.
(2) The higher levels are associated with the use of materials containing chlorine in the batch formulation.
(3) The upper value of the range has been derived from specific reported data.

1.6.5. Metals from melting furnaces

53. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The applicability may be limited by the constraints imposed by the type of glass produced at the installation and the availability of raw materials
(ii) Minimising the use of metal compounds in the batch formulation, through a suitable selection of the raw materials where colouring and decolourising of glass is needed or where specific characteristics are conferred to the glass	The techniques are generally applicable
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 43

BAT-AELs for metal emissions from the melting furnace in the special glass sector

Parameter	BAT-AEL (1) (2)	
	mg/Nm^3	kg/tonne melted glass (3)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,1 – 1	< 0,3 – 3 × 10^{-3}
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 5	< 3 – 15 × 10^{-3}

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The lower levels are BAT-AELs when metal compounds are not intentionally used in the batch formulation.
(3) The conversion factor of 2,5 × 10^{-3} (see Table 2) has been used, with some values indicated in the table having been approximated. A case-by-case conversion factor may have to be applied based on the type of production.

1.6.6. Emissions from downstream processes

54. For downstream dusty processes, BAT is to reduce emissions of dust and metals by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Performing dusty operations (e.g. cutting, grinding, polishing) under liquid	The techniques are generally applicable
(ii) Applying a bag filter system	

(1) A description of the techniques is given in Section 1.10.8.

Table 44

BAT-AELs for dust and metal emissions from downstream processes in the special glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	1 – 10
Σ (As, Co, Ni, Cd, Se, Cr_{VI}) (1)	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn) (1)	< 1 – 5

(1) The levels refer to the sum of metals present in the waste gas.

55. For acid polishing processes, BAT is to reduce HF emissions by using one or a combination of the following techniques:

Technique (1)	Description
(i) Minimising the losses of polishing product by ensuring a good sealing of the application system	The techniques are generally applicable
(ii) Applying a secondary technique, e.g. wet scrubbing	

(1) A description of the techniques is given in Section 1.10.6.

Table 45

BAT-AELs for HF emissions from acid polishing processes in the special glass sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen fluoride, expressed as HF	< 5

1.7. *BAT conclusions for mineral wool manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all mineral wool manufacturing installations.

1.7.1. Dust emissions from melting furnaces

56. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying an electrostatic precipitator or a bag filter system

Technique (1)	Applicability
Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable. Electrostatic precipitators are not applicable to cupola furnaces for stone wool production, due to the risk of explosion from the ignition of carbon monoxide produced within the furnace

(1) A description of the techniques is given in Section 1.10.1.

Table 46

BAT-AELs for dust emissions from the melting furnace in the mineral wool sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Dust	< 10 – 20	< 0,02 – 0,050

(1) The conversion factors of 2×10^{-3} and $2{,}5 \times 10^{-3}$ have been used for the determination of the lower and upper value of the BAT-AELs range (see Table 2), in order to cover both the production of glass wool and stone wool.

1.7.2. Nitrogen oxides (NO_X) from melting furnaces

57. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique [1]	Applicability
(i) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand (i.e. use of recuperative furnaces in place of regenerative furnaces)
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to the technical complexity
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. The achieved environmental benefits are generally lower for applications to cross-fired, gas-fired furnaces due to technical constraints and a lower degree of flexibility of the furnace. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(ii) Electric melting	Not applicable for large volume glass productions (> 300 tonnes/day). Not applicable for productions requiring large pull variations. The implementation requires a complete furnace rebuild
(iii) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

[1] A description of the techniques is given in Section 1.10.2.

Table 47

BAT-AELs for NO_X emissions from the melting furnace in the mineral wool sector

Parameter	Product	Melting technique	BAT-AEL	
			mg/Nm^3	kg/tonne melted glass [1]
NO_X expressed as NO_2	Glass wool	Fuel/air and electric furnaces	< 200 – 500	< 0,4 – 1,0
		Oxy-fuel melting [2]	Not applicable	< 0,5
	Stone wool	All types of furnaces	< 400 – 500	< 1,0 – 1,25

[1] The conversion factors of 2×10^{-3} for glass wool and $2,5 \times 10^{-3}$ for stone wool have been used (see Table 2).
[2] The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

58. When nitrates are used in the batch formulation for glass wool production, BAT is to reduce NO_X emissions by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimising the use of nitrates in the batch formulation The use of nitrates is applied as an oxidising agent in batch formulations with high levels of external cullet to compensate for the presence of organic material contained in the cullet	The technique is generally applicable within the constraints of the quality requirements for the final product
(ii) Electric melting	The technique is generally applicable. The implementation of electric melting requires a complete furnace rebuild
(iii) Oxy-fuel melting	The technique is generally applicable. The maximum environmental benefits are achieved for applications made at the time of a complete furnace rebuild

(1) A description of the techniques is given in Section 1.10.2.

Table 48

BAT-AELs for NO_X emissions from the melting furnace in glass wool production when nitrates are used in the batch formulation

Parameter	BAT	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
NO_X expressed as NO_2	Minimisation of nitrate input in the batch formulation, combined with primary techniques	< 500 – 700	< 1,0 – 1,4 (2)

(1) The conversion factor of 2×10^{-3} has been used (see Table 2).
(2) The lower levels of the ranges are associated with the application of oxy-fuel melting.

1.7.3. Sulphur oxides (SO_X) from melting furnaces

59. BAT is to reduce SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	In glass wool production, the technique is generally applicable within the constraints of the availability of low-sulphur raw materials, in particular external cullet. High levels of external cullet in the batch formulation limit the possibility of optimising the sulphur balance due to a variable sulphur content. In the stone wool production, the optimisation of the sulphur balance may require a trade-off approach between the removal of SO_X emissions from the flue-gases and the management of the solid waste, deriving from the treatment of the flue-gases (filter dust) and/or from the fiberising process, which may be recycled into the batch formulation (cement briquettes) or may need to be disposed of
(ii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	Electrostatic precipitators are not applicable to cupola furnaces for stone wool production (see BAT 56)
(iv) Use of wet scrubbing	The technique is generally applicable within technical constraints; i.e. need for a specific waste water treatment plant

(1) A description of the techniques is given in Sections 1.10.3 and 1.10.6.

Table 49

BAT-AELs for SO_X emissions from the melting furnace in the mineral wool sector

Parameter	Product/conditions	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
SO_X expressed as SO_2	***Glass wool***		
	Gas-fired and electric furnaces (2)	< 50 – 150	< 0,1 – 0,3
	Stone wool		
	Gas-fired and electric furnaces	< 350	< 0,9
	Cupola furnaces, no briquettes or slag recycling (3)	< 400	< 1,0
	Cupola furnaces, with cement briquettes or slag recycling (4)	< 1 400	< 3,5

(1) The conversion factors of 2×10^{-3} for glass wool and $2,5 \times 10^{-3}$ for stone wool have been used (see Table 2).
(2) The lower levels of the ranges are associated with the use of electric melting. The higher levels are associated with high levels of cullet recycling.
(3) The BAT-AEL is associated with conditions where the reduction of SO_X emissions has a high priority over a lower production of solid waste.
(4) When reduction of waste has a high priority over SO_X emissions, higher emission values may be expected. The achievable levels should be based on a sulphur balance.

1.7.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

60. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Description
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable within the constraints of the batch formulation and the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	Electrostatic precipitators are not applicable to cupola furnaces for stone wool production (see BAT 56)

(1) A description of the techniques is given in Section 1.10.4.

Table 50

BAT-AELs for HCl and HF emissions from the melting furnace in the mineral wool sector

Parameter	Product	BAT-AEL	
		mg/Nm^3	kg/tonne melted glass (1)
Hydrogen chloride, expressed as HCl	Glass wool	< 5 – 10	< 0,01 – 0,02
	Stone wool	< 10 – 30	< 0,025 – 0,075
Hydrogen fluoride, expressed as HF	All products	< 1 – 5	< 0,002 – 0,013 (2)

(1) The conversion factors of 2×10^{-3} for glass wool and $2,5 \times 10^{-3}$ for stone wool have been used (see Table 2).
(2) The conversion factors of 2×10^{-3} and $2,5 \times 10^{-3}$ have been used for the determination of the lower and upper values of the BAT-AELs range (see Table 2).

1.7.5. Hydrogen sulphide (H_2S) from stone wool melting furnaces

61. BAT is to reduce H_2S emissions from the melting furnace by applying a waste gas incineration system to oxidise hydrogen sulphide to SO_2

Technique (1)	Applicability
Waste gas incinerator system	The technique is generally applicable to stone wool cupola furnaces

(1) A description of the technique is given in Section 1.10.9.

Table 51

BAT-AELs for H_2S emissions from the melting furnace in stone wool production

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Hydrogen sulphide, expressed as H_2S	< 2	< 0,005

(1) The conversion factor of $2,5 \times 10^{-3}$ for stone wool has been applied (see Table 2).

1.7.6. Metals from melting furnaces

62. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The technique is generally applicable within the constraints of the availability of raw materials. In glass wool production, the use of manganese in the batch formulation as an oxidising agent depends on the quantity and quality of external cullet employed in the batch formulation and may be minimised accordingly
(ii) Application of a filtration system	Electrostatic precipitators are not applicable to cupola furnaces for stone wool production (see BAT 56)

(1) A description of the techniques is given in Section 1.10.5.

Table 52

BAT-AELs for metal emissions from the melting furnace in the mineral wool sector

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 0,2 – 1 (3)	$< 0,4 – 2,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 1 – 2 (3)	$< 2 – 5 \times 10^{-3}$

(1) The ranges refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factors of 2×10^{-3} and $2,5 \times 10^{-3}$ have been used for the determination of the lower and upper values of the BAT-AELs range (see Table 2).
(3) Higher values are associated with the use of cupola furnaces for the production of stone wool.

1.7.7. Emissions from downstream processes

63. BAT is to reduce emissions from downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Impact jets and cyclones The technique is based on the removal of particles and droplets from waste gases by impaction/impingement, as well as gaseous substances by partial absorption with water. Process water is normally used for impact jets. The recycling process water is filtered before it is reapplied	The technique is generally applicable to the mineral wool sector, in particular to glass wool processes for the treatment of emissions from the forming area (application of the coating to the fibres). Limited applicability to stone wool processes since it could adversely affect other abatement techniques being used.
(ii) Wet scrubbers	The technique is generally applicable for the treatment of waste gases from the forming process (application of the coating to the fibres) or for combined waste gases (forming plus curing)
(iii) Wet electrostatic precipitators	The technique is generally applicable for the treatment of waste gases from the forming process (application of the coating to the fibres), from curing ovens or for combined waste gases (forming plus curing)
(iv) Stone wool filters It consists of a steel or concrete structure in which stone wool slabs are mounted and act as a filter medium. The filtering medium needs to be cleaned or exchanged periodically. This filter is suitable for waste gases with a high moisture content and particulate matter with an adhesive nature	The applicability is mainly limited to stone wool processes for waste gases from the forming area and/or curing ovens
(v) Waste gas incineration	The technique is generally applicable for the treatment of waste gases from curing ovens, in particular in the stone wool processes. The application to combined waste gases (forming plus curing) is not economically viable because of the high volume, low concentration, low temperature of the waste gases

([1]) A description of the techniques is given in Sections 1.10.7 and 1.10.9.

Table 53

BAT-AELs for air emissions from downstream processes in the mineral wool sector, when treated separately

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne finished product
Forming area – Combined forming and curing emissions-Combined forming, curing and cooling emissions		
Total particulate matter	< 20 – 50	—
Phenol	< 5 – 10	—
Formaldehyde	< 2 – 5	—
Ammonia	30 – 60	—

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne finished product
Amines	< 3	—
Total volatile organic compounds expressed as C	10 – 30	—
Curing oven emissions (1) (2)		
Total particulate matter	< 5 – 30	< 0,2
Phenol	< 2 – 5	< 0,03
Formaldehyde	< 2 – 5	< 0,03
Ammonia	< 20 – 60	< 0,4
Amines	< 2	< 0,01
Total volatile organic compounds expressed as C	< 10	< 0,065
NO_X, expressed as NO_2	< 100 – 200	< 1

(1) Emission levels expressed in kg/tonne of finished product are not affected by the thickness of the mineral wool mat produced nor by extreme concentration or dilution of the flue-gases. A conversion factor of $6,5 \times 10^{-3}$ has been used.
(2) If high density or high binder content mineral wools are produced, the emission levels associated with the techniques listed as BAT for the sector could be significantly higher than these BAT-AELs. If these types of products represent the majority of the production from a given installation, then consideration should be given to other techniques.

1.8. *BAT conclusions for high temperature insulation wools (HTIW) manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all HTIW manufacturing installations.

1.8.1. Dust emissions from melting and downstream processes

64. BAT is to reduce dust emissions from the waste gases of the melting furnace by applying a filtration system.

Technique (1)	Applicability
The filtration system usually consists of a bag filter	The technique is generally applicable

(1) A description of the technique is given in Section 1.10.1.

Table 54

BAT-AELs for dust emissions from the melting furnace in the HTIW sector

Parameter	BAT	BAT-AEL
		mg/Nm^3
Dust	Flue-gas cleaning by filtration systems	< 5 – 20 (1)

(1) The values are associated with the use of a bag filter system.

65. For downstream dusty processes, BAT is to reduce emissions using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Minimising the losses of product by ensuring a good sealing of the production line, where technically applicable. The potential sources of dust and fibre emissions are: — fiberisation and collection — mat formation (needling) — lubricant burn-off — cutting, trimming and packaging of the finished product A good construction, sealing and maintenance of the downstream processing systems are essential for minimising the losses of product into the air	The techniques are generally applicable
(ii) Cutting, trimming and packaging under vacuum, by applying an efficient extraction system in conjunction with a fabric filter. A negative pressure is applied to the workstation (i.e. cutting machine, cardboard box for packaging) in order to extract particulate and fibrous releases and convey it to a fabric filter	
(iii) Applying a fabric filter system ([1]) Waste gases from downstream operations (e.g. fiberising, mat formation, lubricant burn-off) are conveyed to a treatment system consisting of a bag filter	

([1]) A description of the technique is given in Section 1.10.1.

Table 55

BAT-AELs from dusty downstream processes in the HTIW sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust ([1])	1 – 5

([1]) The lower level of the range is associated with emissions of aluminium silicate glass wool/refractory ceramic fibres (ASW/RCF).

1.8.2. Nitrogen oxides (NO_X) from melting and downstream processes

66. BAT is to reduce NO_X emissions from the lubricant burn-off oven by applying combustion control and/or modifications

Technique	Applicability
Combustion control and/or modifications Techniques to reduce the formation of thermal NO_X emissions include a control of the main combustion parameters: — air/fuel ratio (oxygen content in the reaction zone) — flame temperature — residence time in the high temperature zone. A good combustion control consists of generating those conditions which are least favourable for NO_X formation	The technique is generally applicable

Table 56

BAT-AELs for NO_X from the lubricant burn-off oven in the HTIW sector

Parameter	BAT	BAT-AEL
		mg/Nm^3
NO_X expressed as NO_2	Combustion control and/or modifications	100 – 200

1.8.3. Sulphur oxides (SO_X) from melting and downstream processes

67. BAT is to reduce SO_X emissions from the melting furnaces and downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of sulphur	The technique is generally applicable within the constraints of the availability of raw materials
(ii) Use of low sulphur content fuel	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

([1]) A description of the technique is given in Section 1.10.3.

Table 57

BAT-AELs for SO_X emissions from the melting furnaces and downstream processes in the HTIW sector

Parameter	BAT	BAT-AEL
		mg/Nm^3
SO_x expressed as SO_2	Primary techniques	< 50

1.8.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

68. BAT is to reduce HCl and HF emissions from the melting furnace by selecting raw materials for the batch formulation with a low content of chlorine and fluorine

Technique ([1])	Applicability
Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable

([1]) A description of the technique is given in Section 1.10.4.

Table 58

BAT-AELs for HCl and HF emissions from the melting furnace in the HTIW sector

Parameter	BAT-AEL
	mg/Nm^3
Hydrogen chloride, expressed as HCl	< 10
Hydrogen fluoride, expressed as HF	< 5

1.8.5. Metals from melting furnaces and downstream processes

69. BAT is to reduce metal emissions from the melting furnace and/or downstream processes by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The techniques are generally applicable
(ii) Applying a filtration system	

([1]) A description of the technique is given in Section 1.10.5.

Table 59

BAT-AELs for metal emissions from the melting furnace and/or downstream processes in the HTIW sector

Parameter	BAT-AEL ([1])
	mg/Nm^3
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5

([1]) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.

1.8.6. Volatile organic compounds from downstream processes

70. BAT is to reduce volatile organic compound (VOC) emissions from the lubricant burn-off oven by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Combustion control, including monitoring the associated emissions of CO. The technique consists of the control of combustion parameters (e.g. oxygen content in the reaction zone, flame temperature) in order to ensure a complete combustion of the organic components (i.e. poly-ethylene glycol) in the waste gas. The monitoring of carbon monoxide emissions allows for controlling the presence of uncombusted organic materials	The technique is generally applicable
(ii) Waste gas incineration	The economic viability may limit the applicability of these techniques because of low waste gas volumes and VOC concentrations
(iii) Wet scrubbers	

([1]) A description of the techniques is given in Sections 1.10.6 and 1.10.9.

Table 60

BAT-AELs for VOC emissions from the lubricant burn-off oven in the HTIW sector, when treated separately

Parameter	BAT	BAT-AEL
		mg/Nm^3
Volatile organic compounds expressed as C	Primary and/or secondary techniques	10 – 20

1.9. *BAT conclusions for frits manufacturing*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all frits glass manufacturing installations.

1.9.1. Dust emissions from melting furnaces

71. BAT is to reduce dust emissions from the waste gases of the melting furnace by means of an electrostatic precipitator or a bag filter system.

Technique (1)	Applicability
Filtration system: electrostatic precipitator or bag filter	The technique is generally applicable

(1) A description of the technique is given in Section 1.10.1.

Table 61

BAT-AELs for dust emissions from the melting furnace in the frits sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass (1)
Dust	< 10 – 20	< 0,05 – 0,15

(1) The conversion factors of 5×10^{-3} and $7,5 \times 10^{-3}$ have been used for the determination of the lower and upper value of the BAT-AELs range (see Table 2). However, a case-by-case conversion factor may have to be applied based on the type of combustion.

1.9.2. Nitrogen oxides (NO_X) from melting furnaces

72. BAT is to reduce NO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Minimising the use of nitrates in the batch formulation In the frits production, nitrates are used in the batch formulation of many products in order to obtain the required characteristics	The substitution of nitrates in the batch formulation may be limited by the high costs and/or higher environmental impact of the alternative materials and/or the quality requirements of the final product
(ii) Reduction of the parasitic air entering the furnace The technique consists of preventing the ingress of air into the furnace by sealing the burner blocks, the batch material feeder and any other opening of the melting furnace	The technique is generally applicable
(iii) Combustion modifications	
(a) Reduction of air/fuel ratio	Applicable to air/fuel conventional furnaces. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(b) Reduced combustion air temperature	Applicable only under installation-specific circumstances due to a lower furnace efficiency and higher fuel demand
(c) Staged combustion: — Air staging — Fuel staging	Fuel staging is applicable to most conventional air/fuel furnaces. Air staging has very limited applicability due to its technical complexity

Technique (1)	Applicability
(d) Flue-gas recirculation	The applicability of this technique is limited to the use of special burners with automatic recirculation of the waste gas
(e) Low-NO_X burners	The technique is generally applicable. Full benefits are achieved at normal or complete furnace rebuild, when combined with optimum furnace design and geometry
(f) Fuel choice	The applicability is limited by the constraints associated with the availability of different types of fuel, which may be impacted by the energy policy of the Member State
(iv) Oxy-fuel melting	The maximum environmental benefits are achieved for applications at the time of a complete furnace rebuild

(1) A description of the technique is given in Section 1.10.2.

Table 62

BAT-AELs for NO_X emissions from the melting furnace in the frits glass sector

Parameter	BAT	Operating conditions	BAT-AEL (1)	
			mg/Nm^3	kg/tonne melted glass (2)
NO_X expressed as NO_2	Primary techniques	Oxy-fuel firing, without nitrates (3)	Not applicable	< 2,5 – 5
		Oxy-fuel firing, with use of nitrates	Not applicable	5 – 10
		Fuel/air, fuel/oxygen-enriched air combustion, without nitrates	500 – 1 000	2,5 – 7,5
		Fuel/air, fuel/oxygen-enriched air combustion, with use of nitrates	< 1 600	< 12

(1) The ranges take into account the combination of flue-gases from furnaces applying different melting techniques and producing a variety of frit types, with or without nitrates in the batch formulations, which may be conveyed to a single stack, precluding the possibility of characterising each applied melting technique and the different products.
(2) The conversion factors of 5×10^{-3} and $7,5 \times 10^{-3}$ have been used for the determination of the lower and higher values of the range. However, a case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).
(3) The achievable levels depend on the quality of the natural gas and oxygen available (nitrogen content).

1.9.3. Sulphur oxides (SO_X) from melting furnaces

73. BAT is to control SO_X emissions from the melting furnace by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Selection of raw materials for the batch formulation with a low content of sulphur	The technique is generally applicable within the constraints of the availability of raw materials
(ii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable
(iii) Use of low sulphur content fuels	The applicability may be limited by the constraints associated with the availability of low sulphur fuels, which may be impacted by the energy policy of the Member State

(1) A description of the techniques is given in Section 1.10.3.

Table 63

BAT-AELs for SO_X emissions from the melting furnace in the frits sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
SO_X, expressed as SO_2	< 50 – 200	< 0,25 – 1,5

([1]) The conversion factors of 5 × 10^{-3} and 7,5 × 10^{-3} have been used; however, the values indicated in the table may have been approximated. A case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).

1.9.4. Hydrogen chloride (HCl) and hydrogen fluoride (HF) from melting furnaces

74. BAT is to reduce HCl and HF emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique is generally applicable within the constraints of the batch formulation and the availability of raw materials
(ii) Minimisation of the fluorine compounds in the batch formulation when used to ensure the quality of the final product Fluorine compounds are used to confer particular characteristics to the frits (i.e. thermal and chemical resistance)	The minimisation or substitution of fluorine compounds with alternative materials is limited by quality requirements of the product
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	The technique is generally applicable

([1]) A description of the techniques is given in Section 1.10.4.

Table 64

BAT-AELs for HCl and HF emissions from the melting furnace in the frits sector

Parameter	BAT-AEL	
	mg/Nm^3	kg/tonne melted glass ([1])
Hydrogen chloride, expressed as HCl	< 10	< 0,05
Hydrogen fluoride, expressed as HF	< 5	< 0,03

([1]) The conversion factor of 5 × 10^{-3} has been used with some values being approximated. A case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).

1.9.5. Metals from melting furnaces

75. BAT is to reduce metal emissions from the melting furnace by using one or a combination of the following techniques:

Technique ([1])	Applicability
(i) Selection of raw materials for the batch formulation with a low content of metals	The technique is generally applicable within the constraints of the type of frit produced at the installation and the availability of raw materials

Technique (1)	Applicability
(ii) Minimising of the use of metal compounds in the batch formulation, where colouring is required or other specific characteristics are conferred to the frit	The techniques are generally applicable
(iii) Dry or semi-dry scrubbing, in combination with a filtration system	

(1) A description of the techniques is given in Section 1.10.5.

Table 65

BAT-AELs for metal emissions from the melting furnace in the frits sector

Parameter	BAT-AEL (1)	
	mg/Nm^3	kg/tonne melted glass (2)
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1	$< 7,5 \times 10^{-3}$
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5	$< 37 \times 10^{-3}$

(1) The levels refer to the sum of metals present in the flue-gases in both solid and gaseous phases.
(2) The conversion factor of $7,5 \times 10^{-3}$ has been used. A case-by-case conversion factor may have to be applied based on the type of combustion (see Table 2).

1.9.6. Emissions from downstream processes

76. For downstream dusty processes, BAT is to reduce emissions by using one or a combination of the following techniques:

Technique (1)	Applicability
(i) Applying wet milling techniques The technique consists of grinding the frit to the desired particle size distribution with sufficient liquid to form a slurry. The process is generally carried out in alumina ball mills with water	The techniques are generally applicable
(ii) Operating dry milling and dry product packaging under an efficient extraction system in conjunction with a fabric filter A negative pressure is applied to the milling equipment or to the work station where packaging is carried out in order to convey dust emissions to a fabric filter	
(iii) Applying a filtration system	

(1) A description of the techniques is given in Section 1.10.1.

Table 66

BAT-AELs for air emissions from downstream processes in the frits sector, when treated separately

Parameter	BAT-AEL
	mg/Nm^3
Dust	5 – 10
Σ (As, Co, Ni, Cd, Se, Cr_{VI})	< 1 (1)
Σ (As, Co, Ni, Cd, Se, Cr_{VI}, Sb, Pb, Cr_{III}, Cu, Mn, V, Sn)	< 5 (1)

(1) The levels refer to the sum of metals present in the waste gas.

Glossary

1.10. *Description of techniques*

1.10.1. Dust emissions

Technique	Description
Electrostatic precipitator	Electrostatic precipitators operate such that particles are charged and separated under the influence of an electrical field. Electrostatic precipitators are capable of operating over a wide range of conditions
Bag filter	Bag filters are constructed from porous woven or felted fabric through which gases are flowed to remove particles. The use of a bag filter requires a fabric material selection adequate to the characteristics of the waste gases and the maximum operating temperature
Reduction of the volatile components by raw material modifications	The formulation of batch compositions might contain very volatile components (e.g. boron compounds) which could be minimised or substituted for reducing dust emissions mainly generated by volatilisation phenomena
Electric melting	The technique consists of a melting furnace where the energy is provided by resistive heating. In the cold-top furnaces (where the electrodes are generally inserted at the bottom of the furnace) the batch blanket covers the surface of the melt with a consequent, significant reduction of the volatilisation of batch components (i.e. lead compounds)

1.10.2. NO_X emissions

Technique	Description
Combustion modifications	
(i) Reduction of air/fuel ratio	The technique is mainly based on the following features: — minimisation of air leakages into the furnace — careful control of air used for combustion — modified design of the furnace combustion chamber
(ii) Reduced combustion air temperature	The use of recuperative furnaces, in place of regenerative furnaces, results in a reduced air preheat temperature and, consequently, a lower flame temperature. However, this is associated with a lower furnace efficiency (lower specific pull), lower fuel efficiency and higher fuel demand, resulting in potentially higher emissions (kg/tonne of glass)
(iii) Staged combustion	— Air staging – involves substoichiometric firing and the addition of the remaining air or oxygen into the furnace to complete combustion. — Fuel staging – a low impulse primary flame is developed in the port neck (10 % of total energy); a secondary flame covers the root of the primary flame reducing its core temperature
(iv) Flue-gas recirculation	Implies the reinjection of waste gas from the furnace into the flame to reduce the oxygen content and therefore the temperature of the flame. The use of special burners is based on internal recirculation of combustion gases which cool the root of the flames and reduce the oxygen content in the hottest part of the flames
(v) Low-NO_X burners	The technique is based on the principles of reducing peak flame temperatures, delaying but completing the combustion and increasing the heat transfer (increased emissivity of the flame). It may be associated with a modified design of the furnace combustion chamber

Technique	Description
(vi) Fuel choice	In general, oil-fired furnaces show lower NO_X emissions than gas-fired furnaces due to better thermal emissivity and lower flame temperatures
Special furnace design	Recuperative type furnace that integrates various features, allowing for lower flame temperatures. The main features are: — specific type of burners (number and positioning) — modified geometry of the furnace (height and size) — two-stage raw material preheating with waste gases passing over the raw materials entering the furnace and an external cullet preheater downstream of the recuperator used for preheating the combustion air
Electric melting	The technique consists of a melting furnace where the energy is provided by resistive heating. The main features are: — electrodes are generally inserted at the bottom of the furnace (cold-top) — nitrates are often required in the batch composition of cold-top electric furnaces to provide the necessary oxidising conditions for a stable, safe and efficient manufacturing process
Oxy-fuel melting	The technique involves the replacement of the combustion air with oxygen (> 90 % purity), with consequent elimination/reduction of thermal NO_X formation from nitrogen entering the furnace. The residual nitrogen content in the furnace depends on the purity of the oxygen supplied, on the quality of the fuel (% N_2 in natural gas) and on the potential air inlet
Chemical reduction by fuel	The technique is based on the injection of fossil fuel to the waste gas with chemical reduction of NO_X to N_2 through a series of reactions. In the 3R process, the fuel (natural gas or oil) is injected at the regenerator entrance. The technology is designed for use in regenerative furnaces
Selective catalytic reduction (SCR)	The technique is based on the reduction of NO_X to nitrogen in a catalytic bed by reaction with ammonia (in general aqueous solution) at an optimum operating temperature of around 300 – 450 °C. One or two layers of catalyst may be applied. A higher NO_X reduction is achieved with the use of higher amounts of catalyst (two layers)
Selective non-catalytic reduction (SNCR)	The technique is based on the reduction of NO_X to nitrogen by reaction with ammonia or urea at a high temperature. The operating temperature window must be maintained between 900 and 1 050 °C
Minimising the use of nitrates in the batch formulation	The minimisation of nitrates is used to reduce NO_X emissions deriving from the decomposition of these raw materials when applied as an oxidising agent for very high quality products where a very colourless (clear) glass is required or for other glasses to provide the required characteristics. The following options may be applied: — Reduce the presence of nitrates in the batch formulation to the minimum commensurate with the product and melting requirements. — Substitute nitrates with alternative materials. Effective alternatives are sulphates, arsenic oxides, cerium oxide. — Apply process modifications (e.g. special oxidising combustion conditions)

1.10.3. SO_X emissions

Technique	Description
Dry or semi-dry scrubbing, in combination with a filtration system	Dry powder or a suspension/solution of alkaline reagent are introduced and dispersed in the waste gas stream. The material reacts with the sulphur gaseous species to form a solid which has to be removed by filtration (bag filter or electrostatic precipitator). In general, the use of a reaction tower improves the removal efficiency of the scrubbing system
Minimisation of the sulphur content in the batch formulation and optimisation of the sulphur balance	The minimisation of sulphur content in the batch formulation is applied to reduce SO_X emissions deriving from the decomposition of sulphur-containing raw materials (in general, sulphates) used as fining agents. The effective reduction of SO_X emissions depends on the retention of sulphur compounds in the glass, which may vary significantly depending on the glass type, and on the optimisation of the sulphur balance
Use of low sulphur content fuels	The use of natural gas or low sulphur fuel oil is applied to reduce the amount of SO_X emissions deriving from the oxidation of sulphur contained in the fuel during combustion

1.10.4. HCl, HF emissions

Technique	Description
Selection of raw materials for the batch formulation with a low content of chlorine and fluorine	The technique consists of a careful selection of raw materials that may contain chlorides and fluorides as impurities (e.g. synthetic soda ash, dolomite, external cullet, recycled filter dust) in order to reduce at source HCl and HF emissions which arise from the decomposition of these materials during the melting process
Minimisation of the fluorine and/or chlorine compounds in the batch formulation and optimisation of the fluorine and/or chlorine mass balance	The minimisation of fluorine and/or chlorine emissions from the melting process may be achieved by minimising/reducing the quantity of these substances used in the batch formulation to the minimum commensurate with the quality of the final product. Fluorine compounds (e.g. fluorspar, cryolite, fluorsilicate) are used to confer particular characteristics to special glasses (e.g. opaque glass, optical glass). Chlorine compounds may be used as fining agents
Dry or semi-dry scrubbing, in combination with a filtration system	Dry powder or a suspension/solution of alkaline reagent are introduced and dispersed in the waste gas stream. The material reacts with the gaseous chlorides and fluorides to form a solid which has to be removed by filtration (electrostatic precipitator or bag filter)

1.10.5. Metal emissions

Technique	Description
Selection of raw materials for the batch formulation with a low content of metals	The technique consists of a careful selection of batch materials that may contain metals as impurities (e.g. external cullet), in order to reduce at source metal emissions which arise from the decomposition of these materials during the melting process
Minimising the use of metal compounds in the batch formulation, where colouring and decolourising of glass is needed, subject to consumer glass quality requirements	The minimisation of metal emissions from the melting process may be achieved as follows: — minimising the quantity of metal compounds in the batch formulation (e.g. iron, chromium, cobalt, copper, manganese compounds) in the production of coloured glasses — minimising the quantity of selenium compounds and cerium oxide used as decolourising agents for the production of clear glass

Technique	Description
Minimising the use of selenium compounds in the batch formulation, through a suitable selection of the raw materials	The minimisation of selenium emissions from the melting process may be achieved by: — minimising/reducing the quantity of selenium in the batch formulation to the minimum commensurate with the product requirements — selecting selenium raw materials with a lower volatility, in order to reduce the volatilisation phenomena during the melting process
Application of a filtration system	Dust abatement systems (bag filter and electrostatic precipitator) can reduce both dust and metal emissions since the emissions to air of metals from glass melting processes are largely contained in particulate form. However, for some metals presenting extremely volatile compounds (e.g. selenium) the removal efficiency may vary significantly with the filtration temperature
Dry or semi-dry scrubbing, in combination with a filtration system	Gaseous metals can be substantially reduced by the use of a dry or semi-dry scrubbing technique with an alkaline reagent. The alkaline reagent reacts with the gaseous species to form a solid which has to be removed by filtration (bag filter or electrostatic precipitator)

1.10.6. Combined gaseous emissions (e.g. SO_X, HCl, HF, boron compounds)

Wet scrubbing	In the wet scrubbing process, gaseous compounds are dissolved in a suitable liquid (water or alkaline solution). Downstream of the wet scrubber, the flue-gases are saturated with water and a separation of the droplets is required before discharging the flue-gases. The resulting liquid has to be treated by a waste water process and the insoluble matter is collected by sedimentation or filtration

1.10.7. Combined emissions (solid + gaseous)

Technique	Description
Wet scrubbing	In a wet scrubbing process (by a suitable liquid: water or alkaline solution), the simultaneous removal of solid and gaseous compounds may be achieved. The design criteria for particulate or gas removal are different; therefore, the design is often a compromise between the two options. The resulting liquid has to be treated by a waste water process and the insoluble matter (solid emissions and products from chemical reactions) is collected by sedimentation or filtration. In the mineral wool and continuous filament glass fibre sector, the most common systems applied are: — packed bed scrubbers with impact jets upstream — venturi scrubbers
Wet electrostatic precipitator	The technique consists of an electrostatic precipitator in which the collected material is removed from the plates of the collectors by flushing with a suitable liquid, usually water. Some mechanism is usually installed to remove water droplets before discharge of the waste gas (demister or a last dry field)

1.10.8. Emissions from cutting, grinding, polishing operations

Technique	Description
Performing dusty operations (e.g. cutting, grinding, polishing) under liquid	Water is generally used as a coolant for cutting, grinding and polishing operations and for preventing dust emissions. An extraction system equipped with a mist eliminator may be necessary

Technique	Description
Applying a bag filter system	The use of bag filters is suitable for the reduction of both dust and metal emissions since metals from downstream processes are largely contained in particulate form
Minimising the losses of polishing product by ensuring a good sealing of the application system	Acid polishing is performed by immersion of the glass articles in a polishing bath of hydrofluoric and sulphuric acids. The release of fumes may be minimised by a good design and maintenance of the application system in order to minimise losses
Applying a secondary technique, e.g. wet scrubbing	Wet scrubbing with water is used for the treatment of waste gases, due to the acidic nature of the emissions and the high solubility of the gaseous pollutants to be removed

1.10.9. H_2S, VOC emissions

Waste gas incineration	The technique consists of an afterburner system which oxidises the hydrogen sulphide (generated by strong reducing conditions in the melting furnace) to sulphur dioxide and carbon monoxide to carbon dioxide. Volatile organic compounds are thermally incinerated with consequent oxidation to carbon dioxide, water and other combustion products (e.g. NO_X, SO_X)

COMMISSION IMPLEMENTING DECISION

of 28 February 2012

establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for iron and steel production

(notified under document C(2012) 903)

(Text with EEA relevance)

(2012/135/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [1], and in particular Article 13(5) thereof,

Whereas:

(1) Article 13(1) of Directive 2010/75/EU requires the Commission to organise an exchange of information on industrial emissions between it and Member States, the industries concerned and non-governmental organisations promoting environmental protection in order to facilitate the drawing up of best available techniques (BAT) reference documents as defined in Article 3(11) of that Directive.

(2) In accordance with Article 13(2) of Directive 2010/75/EU, the exchange of information is to address the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste and the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein and also the best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b) of Article 13(2) of that Directive.

(3) 'BAT conclusions' as defined in Article 3(12) of Directive 2010/75/EU are the key element of BAT reference documents and lay down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

(4) In accordance with Article 14(3) of Directive 2010/75/EU, BAT conclusions are to be the reference for setting the permit conditions for installations covered by Chapter 2 of that Directive.

(5) Article 15(3) of Directive 2010/75/EU requires the competent authority to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) of that Directive.

(6) Article 15(4) of Directive 2010/75 provides for derogations from the requirement laid down in Article 15(3) only where the costs associated with the achievement of emissions levels disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned.

(7) Article 16(1) of Directive 2010/75/EU provides that the monitoring requirements in the permit referred to in point (c) of Article 14(1) are to be based on the conclusions on monitoring as described in the BAT conclusions.

(8) In accordance with Article 21(3) of Directive 2010/75/EU, within four years of publication of decisions on BAT conclusions, the competent authority is to reconsider and, if necessary, update all the permit conditions and ensure that the installation complies with those permit conditions.

(9) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of the Directive 2010/75/EU on industrial emissions [2] established a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

[1] OJ L 334, 17.12.2010, p. 17.

[2] OJ C 146, 17.5.2011, p. 3.

(10) In accordance with Article 13(4) of Directive 2010/75/EU, the Commission obtained the opinion [1] of that forum on the proposed content of the BAT reference document for iron and steel production on 13 September 2011 and made it publicly available.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The BAT conclusions for iron and steel production are set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 28 February 2012.

For the Commission
Janez POTOČNIK
Member of the Commission

[1] http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/opinions_article

ANNEX

BAT CONCLUSIONS FOR IRON AND STEEL PRODUCTION

SCOPE

These BAT conclusions concern the following activities specified in Annex I to Directive 2010/75/EU, namely:

— activity 1.3: coke production

— activity 2.1: metal ore (including sulphide ore) roasting and sintering

— activity 2.2: production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour.

In particular, the BAT conclusions cover the following processes:

— the loading, unloading and handling of bulk raw materials

— the blending and mixing of raw materials

— the sintering and pelletisation of iron ore

— the production of coke from coking coal

— the production of hot metal by the blast furnace route, including slag processing

— the production and refining of steel using the basic oxygen process, including upstream ladle desulphurisation, downstream ladle metallurgy and slag processing

— the production of steel by electric arc furnaces, including downstream ladle metallurgy and slag processing

— continuous casting (thin slab/thin strip and direct sheet casting (near-shape))

These BAT conclusions do not address the following activities:

— production of lime in kilns, covered by the Cement, Lime and Magnesium Oxide Manufacturing Industries BREF (CLM)

— the treatment of dusts to recover non-ferrous metals (e.g. electric arc furnace dust) and the production of ferroalloys, covered by the Non-Ferrous Metals Industries BREF (NFM)

— sulphuric acid plants in coke ovens, covered by the Large Volume Inorganic Chemicals-Ammonia, Acids and Fertilisers Industries (LVIC-AAF BREF).

Other reference documents which are of relevance for the activities covered by these BAT conclusions are the following:

Reference documents	Activity
Large Combustion Plants BREF (LCP)	Combustion plants with a rated thermal input of 50 MW or more
Ferrous Metals Processing Industry BREF (FMP)	Downstream processes like rolling, pickling, coating, etc.
	Continuous casting to the thin slab/thin strip and direct sheet casting (near-shape)

Reference documents	Activity
Emissions from Storage BREF (EFS)	Storage and handling
Industrial Cooling Systems BREF (ICS)	Cooling systems
General Principles of Monitoring (MON)	Emissions and consumptions monitoring
Energy Efficiency BREF (ENE)	General energy efficiency
Economic and Cross-Media Effects (ECM)	Economic and cross-media effects of techniques

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

GENERAL CONSIDERATIONS

The environmental performance levels associated with BAT are expressed as ranges, rather than as single values. A range may reflect the differences within a given type of installation (e.g. differences in the grade/purity and quality of the final product, differences in design, construction, size and capacity of the installation) that result in variations in the environmental performances achieved when applying BAT

EXPRESSION OF EMISSION LEVELS ASSOCIATED WITH THE BEST AVAILABLE TECHNIQUES (BAT-AELs)

In these BAT conclusions, BAT-AELs for air emissions are expressed as either:

— mass of emitted substances per volume of waste gas under standard conditions (273,15 K, 101,3 kPa), after deduction of water vapour content, expressed in the units g/Nm^3, mg/Nm^3, $\mu g/Nm^3$ or ng/Nm^3; or

— mass of emitted substances per unit of mass of products generated or processed (consumption or emission factors), expressed in the units kg/t, g/t, mg/t or µg/t.

and BAT-AELs for emissions to water are expressed as:

— mass of emitted substances per volume of waste water, expressed in the units g/l, mg/l or µg/l.

DEFINITIONS

For the purposes of these BAT conclusions:

— 'new plant' means: a plant introduced on the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant on the existing foundations of the installation following the publication of these BAT conclusions

— 'existing plant' means: a plant which is not a new plant

— 'NO_X' means: the sum of nitrogen oxide (NO) and nitrogen dioxide (NO_2) expressed as NO_2

— 'SO_X' means: the sum of sulphur dioxide (SO_2) and sulphur trioxide (SO_3) expressed as SO_2

— 'HCl' means: all gaseous chlorides expressed as HCl

— 'HF' means: all gaseous fluorides expressed as HF

1.1. *General BAT Conclusions*

Unless otherwise stated, the BAT conclusions presented in this section are generally applicable.

The process specific BAT included in the Sections 1.2 – 1.7 apply in addition to the general BAT mentioned in this Section.

1.1.1. Environmental management systems

1. BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

I. commitment of management, including senior management;

II. definition of an environmental policy that includes continuous improvement for the installation by the management;

III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;

IV. implementation of the procedures paying particular attention to:

(i) structure and responsibility

(ii) training, awareness and competence

(iii) communication

(iv) employee involvement

(v) documentation

(vi) efficient process control

(vii) maintenance programmes

(viii) emergency preparedness and response

(ix) safeguarding compliance with environmental legislation;

V. checking performance and taking corrective action, paying particular attention to:

(i) monitoring and measurement (see also the Reference Document on the General Principles of Monitoring)

(ii) corrective and preventive action

(iii) maintenance of records

(iv) independent (where practicable) internal and external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

VI. review of the EMS and its continuing suitability, adequacy and effectiveness by senior management;

VII. following the development of cleaner technologies;

VIII. consideration for the environmental impacts from the eventual decommissioning of the installation at the stage of designing a new plant, and throughout its operating life;

IX. application of sectoral benchmarking on a regular basis.

Applicability

The scope (e.g. level of details) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2. Energy management

2. BAT is to reduce thermal energy consumption by using a combination of the following techniques:

I. improved and optimised systems to achieve smooth and stable processing, operating close to the process parameter set points by using

(i) process control optimisation including computer-based automatic control systems

(ii) modern, gravimetric solid fuel feed systems

(iii) preheating, to the greatest extent possible, considering the existing process configuration.

II. recovering excess heat from processes, especially from their cooling zones

III. an optimised steam and heat management

IV. applying process integrated reuse of sensible heat as much as possible.

In the context of energy management, see the Energy Efficiency BREF (ENE).

Description of BAT I.i

The following items are important for integrated steelworks in order to improve the overall energy efficiency:

— optimising energy consumption

— online monitoring for the most important energy flows and combustion processes at the site including the monitoring of all gas flares in order to prevent energy losses, enabling instant maintenance and achieving an undisrupted production process

— reporting and analysing tools to check the average energy consumption of each process

— defining specific energy consumption levels for relevant processes and comparing them on a long-term basis

— carrying out energy audits as defined in the Energy Efficiency BREF, e.g. to identify cost-effective energy savings opportunities.

Description of BAT II – IV

Process integrated techniques used to improve energy efficiency in steel manufacturing by improved heat recovery include:

— combined heat and power production with recovery of waste heat by heat exchangers and distribution either to other parts of the steelworks or to a district heating network

— the installation of steam boilers or adequate systems in large reheating furnaces (furnaces can cover a part of the steam demand)

— preheating of the combustion air in furnaces and other burning systems to save fuel, taking into consideration adverse effects, i.e. an increase of nitrogen oxides in the off-gas

— the insulation of steam pipes and hot water pipes

— recovery of heat from products, e.g. sinter

— where steel needs to be cooled, the use of both heat pumps and solar panels

— the use of flue-gas boilers in furnaces with high temperatures

— the oxygen evaporation and compressor cooling to exchange energy across standard heat exchangers

— the use of top recovery turbines to convert the kinetic energy of the gas produced in the blast furnace into electric power.

Applicability of BAT II – IV

Combined heat and power generation is applicable for all iron and steel plants close to urban areas with a suitable heat demand. The specific energy consumption depends on the scope of the process, the product quality and the type of installation (e.g. the amount of vacuum treatment at the basic oxygen furnace (BOF), annealing temperature, thickness of products, etc.).

3. BAT is to reduce primary energy consumption by optimisation of energy flows and optimised utilisation of the extracted process gases such as coke oven gas, blast furnace gas and basic oxygen gas.

Description

Process integrated techniques to improve energy efficiency in an integrated steelworks by optimising process gas utilisation include:

— the use of gas holders for all by-product gases or other adequate systems for short-term storage and pressure holding facilities

— increasing pressure in the gas grid if there are energy losses in the flares – in order to utilise more process gases with the resulting increase in the utilisation rate

— gas enrichment with process gases and different calorific values for different consumers

— heating fire furnaces with process gas

— use of a computer-controlled calorific value control system

— recording and using coke and flue-gas temperatures

— adequate dimensioning of the capacity of the energy recovery installations for the process gases, in particular with regard to the variability of process gases.

Applicability

The specific energy consumption depends on the scope of the process, the product quality and the type of installation (e.g. the amount of vacuum treatment at the BOF, annealing temperature, thickness of products, etc.).

4. BAT is to use desulphurised and dedusted surplus coke oven gas and dedusted blast furnace gas and basic oxygen gas (mixed or separate) in boilers or in combined heat and power plants to generate steam, electricity and/or heat using surplus waste heat for internal or external heating networks, if there is a demand from a third party.

Applicability

The cooperation and agreement of a third party may not be within the control of the operator, and therefore may not be within the scope of the permit.

5. BAT is to minimise electrical energy consumption by using one or a combination of the following techniques:

I. power management systems

II. grinding, pumping, ventilation and conveying equipment and other electricity-based equipment with high energy efficiency.

Applicability

Frequency controlled pumps cannot be used where the reliability of the pumps is of essential importance for the safety of the process.

1.1.3. Material management

6. BAT is to optimise the management and control of internal material flows in order to prevent pollution, prevent deterioration, provide adequate input quality, allow reuse and recycling and to improve the process efficiency and optimisation of the metal yield.

Description

Appropriate storage and handling of input materials and production residues can help to minimise the airborne dust emissions from stockyards and conveyor belts, including transfer points, and to avoid soil, groundwater and runoff water pollution (see also BAT 11).

The application of an adequate management of integrated steelworks and residues, including wastes, from other installations and sectors allows for a maximised internal and/or external use as raw materials (see also BAT 8, 9 and 10).

Material management includes the controlled disposal of small parts of the overall quantity of residues from an integrated steelworks which have no economic use.

7. In order to achieve low emission levels for relevant pollutants, BAT is to select appropriate scrap qualities and other raw materials. Regarding scrap, BAT is to undertake an appropriate inspection for visible contaminants which might contain heavy metals, in particular mercury, or might lead to the formation of polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB).

To improve the use of scrap, the following techniques can be used individually or in combination:

— specification of acceptance criteria suited to the production profile in purchase orders of scrap

— having a good knowledge of scrap composition by closely monitoring the origin of the scrap; in exceptional cases, a melt test might help characterise the composition of the scrap

— having adequate reception facilities and check deliveries

— having procedures to exclude scrap that is not suitable for use in the installation

— storing the scrap according to different criteria (e.g. size, alloys, degree of cleanliness); storing of scrap with potential release of contaminants to the soil on impermeable surfaces with a drainage and collection system; using a roof which can reduce the need for such a system

— putting together the scrap load for the different melts taking into account the knowledge of composition in order to use the most suitable scrap for the steel grade to be produced (this is essential in some cases to avoid the presence of undesired elements and in other cases to take advantage of alloy elements which are present in the scrap and needed for the steel grade to be produced)

— prompt return of all internally-generated scrap to the scrapyard for recycling

— having an operation and management plan

— scrap sorting to minimise the risk of including hazardous or non-ferrous contaminants, particularly polychlorinated biphenyls (PCB) and oil or grease. This is normally done by the scrap supplier but the operator inspects all scrap loads in sealed containers for safety reasons. Therefore, at the same time, it is possible to check, as far as practicable, for contaminants. Evaluation of the small quantities of plastic (e.g. as plastic coated components) may be required

— radioactivity control according to the United Nations Economic Commission for Europe (UNECE) Expert Group framework of recommendations

— implementation of the mandatory removal of components which contain mercury from End-of-Life Vehicles and Waste Electrical and Electronic Equipment (WEEE) by the scrap processors can be improved by:

— fixing the absence of mercury in scrap purchase contracts

— refusal of scrap which contains visible electronic components and assemblies.

Applicability

The selection and sorting of scrap might not be entirely within the control of the operator.

1.1.4. Management of process residues such as by-products and waste

8. BAT for solid residues is to use integrated techniques and operational techniques for waste minimisation by internal use or by application of specialised recycling processes (internally or externally).

Description

Techniques for the recycling of iron-rich residues include specialised recycling techniques such as the OxyCup® shaft furnace, the DK process, smelting reduction processes or cold bonded pelletting/briquetting as well as techniques for production residues mentioned in Sections 9.2 – 9.7.

Applicability

As the mentioned processes may be carried out by a third party, the recycling itself may not be within the control of the operator of the iron and steel plant, and therefore may not be within the scope of the permit.

9. BAT is to maximise external use or recycling for solid residues which cannot be used or recycled according to BAT 8, wherever this is possible and in line with waste regulations. BAT is to manage in a controlled manner residues which can neither be avoided nor recycled.

10. BAT is to use the best operational and maintenance practices for the collection, handling, storage and transport of all solid residues and for the hooding of transfer points to avoid emissions to air and water.

1.1.5. Diffuse dust emissions from materials storage, handling and transport of raw materials and (intermediate) products

11. BAT is to prevent or reduce diffuse dust emissions from materials storage, handling and transport by using one or a combination of the techniques mentioned below.

If abatement techniques are used, BAT is to optimise the capture efficiency and subsequent cleaning through appropriate techniques such as those mentioned below. Preference is given to the collection of the dust emissions nearest to the source.

I. General techniques include:

— the setting up within the EMS of the steelworks of an associated diffuse dust action plan;

— consideration of temporary cessation of certain operations where they are identified as a source of PM_{10} causing a high ambient reading; in order to do this, it will be necessary to have sufficient PM_{10} monitors, with associated wind direction and strength monitoring, to be able to triangulate and identify key sources of fine dust.

II. Techniques for the prevention of dust releases during the handling and transport of bulk raw materials include:

— orientation of long stockpiles in the direction of the prevailing wind

— installing wind barriers or using natural terrain to provide shelter

— controlling the moisture content of the material delivered

— careful attention to procedures to avoid the unnecessary handling of materials and long unenclosed drops

— adequate containment on conveyors and in hoppers, etc.

— the use of dust-suppressing water sprays, with additives such as latex, where appropriate

— rigorous maintenance standards for equipment

— high standards of housekeeping, in particular the cleaning and damping of roads

— the use of mobile and stationary vacuum cleaning equipment

— dust suppression or dust extraction and the use of a bag filter cleaning plant to abate sources of significant dust generation

— the application of emissions-reduced sweeping cars for carrying out the routine cleaning of hard surfaced roads.

III. Techniques for materials delivery, storage and reclamation activities include:

— total enclosure of unloading hoppers in a building equipped with filtered air extraction for dusty materials, or hoppers should be fitted with dust baffles and the unloading grids coupled to a dust extraction and cleaning system

— limiting the drop heights if possible to a maximum of 0,5 m

— the use of water sprays (preferably using recycled water) for dust suppression

— where necessary, the fitting of storage bins with filter units to control dust

— the use of totally enclosed devices for reclamation from bins

— where necessary, the storage of scrap in covered, and hard surfaced areas to reduce the risk of ground contamination (using just in time delivery to minimise the size of the yard and hence emissions)

— minimisation of the disturbance of stockpiles

— restriction of the height and a controlling of the general shape of stockpiles

— the use of in-building or in-vessel storage, rather than external stockpiles, if the scale of storage is appropriate

— the creation of windbreaks by natural terrain, banks of earth or the planting of long grass and evergreen trees in open areas to capture and absorb dust without suffering long-term harm

— hydro-seeding of waste tips and slag heaps

— implementation of a greening of the site by covering unused areas with top soil and planting grass, shrubs and other ground covering vegetation

— the moistening of the surface using durable dust-binding substances

— the covering of the surface with tarpaulins or coating (e.g. latex) stockpiles

— the application of storage with retaining walls to reduce the exposed surface

— when necessary, a measure could be to include impermeable surfaces with concrete and drainage.

IV. Where fuel and raw materials are delivered by sea and dust releases could be significant, some techniques include:

— use by operators of self-discharge vessels or enclosed continuous unloaders. Otherwise, dust generated by grab-type ship unloaders should be minimised through a combination of ensuring adequate moisture content of the material is delivered, by minimising drop heights and by using water sprays or fine water fogs at the mouth of the ship unloader hopper

— avoiding seawater in spraying ores or fluxes as this results in a fouling of sinter plant electrostatic precipitators with sodium chloride. Additional chlorine input in the raw materials may also lead to rising emissions (e.g. of polychlorinated dibenzodioxins/furans (PCDD/F)) and hamper filter dust recirculation

— storage of powdered carbon, lime and calcium carbide in sealed silos and conveying them pneumatically or storing and transferring them in sealed bags.

V. Train or truck unloading techniques include:

— if necessary due to dust emission formation, use of dedicated unloading equipment with a generally enclosed design.

VI. For highly drift-sensitive materials which may lead to significant dust release, some techniques include:

— use of transfer points, vibrating screens, crushers, hoppers and the like, which may be totally enclosed and extracted to a bag filter plant

— use of central or local vacuum cleaning systems rather than washing down for the removal of spillage, since the effects are restricted to one medium and the recycling of spilt material is simplified.

VII. Techniques for the handling and processing of slag include:

— keeping stockpiles of slag granulate damp for slag handling and processing since dried blast furnace slag and steel slag can give rise to dust

— use of enclosed slag-crushing equipment fitted with efficient extraction and bag filters to reduce dust emissions.

VIII. Techniques for handling scrap include:

— providing scrap storage under cover and/or on concrete floors to minimise dust lift-off caused by vehicle movements

IX. Techniques to consider during material transport include:

— the minimisation of points of access from public highways

— the employment of wheel-cleaning equipment to prevent the carryover of mud and dust onto public roads

— the application of hard surfaces to the transport roads (concrete or asphalt) to minimise the generation of dust clouds during materials transport and the cleaning of roads

— the restriction of vehicles to designated routes by fences, ditches or banks of recycled slag

— the damping of dusty routes by water sprays, e.g. at slag-handling operations

— ensuring that transport vehicles are not overfull, so as to prevent any spillage

— ensuring that transport vehicles are sheeted to cover the material carried

— the minimisation of numbers of transfers

— use of closed or enclosed conveyors

— use of tubular conveyors, where possible, to minimise material losses by changes of direction across sites usually provided by the discharge of materials from one belt onto another

— good practice techniques for molten metal transfer and ladle handling

— dedusting of conveyor transfer points.

1.1.6. Water and waste water management

12. BAT for waste water management is to prevent, collect and separate waste water types, maximising internal recycling and using an adequate treatment for each final flow. This includes techniques utilising, e.g. oil interceptors, filtration or sedimentation. In this context, the following techniques can be used where the prerequisites mentioned are present:

— avoiding the use of potable water for production lines

— increasing the number and/or capacity of water circulating systems when building new plants or modernising/revamping existing plants

— centralising the distribution of incoming fresh water

— using the water in cascades until single parameters reach their legal or technical limits

— using the water in other plants if only single parameters of the water are affected and further usage is possible

— keeping treated and untreated waste water separated; by this measure it is possible to dispose of waste water in different ways at a reasonable cost

— using rainwater whenever possible.

Applicability

The water management in an integrated steelworks will primarily be constrained by the availability and quality of fresh water and local legal requirements. In existing plants the existing configuration of the water circuits may limit applicability.

1.1.7. Monitoring

13. BAT is to measure or assess all relevant parameters necessary to steer the processes from control rooms by means of modern computer-based systems in order to adjust continuously and to optimise the processes online, to ensure stable and smooth processing, thus increasing energy efficiency and maximising the yield and improving maintenance practices.

14. BAT is to measure the stack emissions of pollutants from the main emission sources from all processes included in the Sections 1.2 – 1.7 whenever BAT-AELs are given and in process gas-fired power plants in iron and steel works.

BAT is to use continuous measurements at least for:

— primary emissions of dust, nitrogen oxides (NO_X) and sulphur dioxide (SO_2) from sinter strands

— nitrogen oxides (NO_X) and sulphur dioxide (SO_2) emissions from induration strands of pelletisation plants

— dust emissions from blast furnace cast houses

— secondary emissions of dust from basic oxygen furnaces

— emissions of nitrogen oxides (NO_X) from power plants

— dust emissions from large electric arc furnaces.

For other emissions, BAT is to consider using continuous emission monitoring depending on the mass flow and emission characteristics.

15. For relevant emission sources not mentioned in BAT 14, BAT is to measure the emissions of pollutants from all processes included in the Sections 1.2 – 1.7 and from process gas-fired power plants within iron and steel works as well as all relevant process gas components/pollutants periodically and discontinuously. This includes the discontinuous monitoring of process gases, stack emissions, polychlorinated dibenzodioxins/furans (PCDD/F) and monitoring the discharge of waste water, but excludes diffuse emissions (see BAT 16).

Description (relevant for BAT 14 and 15)

The monitoring of process gases provides information about the composition of process gases and about indirect emissions from the combustion of process gases, such as emissions of dust, heavy metals and SO_x.

Stack emissions can be measured by regular, periodic discontinuous measurements at relevant channelled emission sources over a sufficiently long period, to obtain representative emission values.

For monitoring the discharge of waste water a great variety of standardised procedures exist for sampling and analyzing water and waste water, including:

— a random sample which refers to a single sample taken from a waste water flow

— a composite sample, which refers to a sample taken continuously over a given period, or a sample consisting of several samples taken either continuously or discontinuously over a given period and blended

— a qualified random sample shall refer to a composite sample of at least five random samples taken over a maximum period of two hours at intervals of no less than two minutes, and blended.

Monitoring should be done according to the relevant EN or ISO standards. If EN or ISO standards are not available, national or other international standards should be used that ensure the provision of data of an equivalent scientific quality.

16. BAT is to determine the order of magnitude of diffuse emissions from relevant sources by the methods mentioned below. Whenever possible, direct measurement methods are preferred over indirect methods or evaluations based on calculations with emission factors.

— Direct measurement methods where the emissions are measured at the source itself. In this case, concentrations and mass streams can be measured or determined.

— Indirect measurement methods where the emission determination takes place at a certain distance from the source; a direct measurement of concentrations and mass stream is not possible.

— Calculation with emission factors.

Description

Direct or quasi-direct measurement

Examples for direct measurements are measurements in wind tunnels, with hoods or other methods like quasi-emissions measurements on the roof of an industrial installation. For the latter case, the wind velocity and the area of the roofline vent are measured and a flow rate is calculated. The cross-section of the measurement plane of the roofline vent is subdivided into sectors of identical surface area (grid measurement).

Indirect measurements

Examples of indirect measurements include the use of tracer gases, reverse dispersion modelling (RDM) methods and the mass balance method applying light detection and ranging (LIDAR).

Calculation of emissions with emission factors

Guidelines using emission factors for the estimation of diffuse dust emissions from storage and handling of bulk materials and for the suspension of dust from roadways due to traffic movements are:

— VDI 3790 Part 3

— US EPA AP 42

1.1.8. Decommissioning

17. BAT is to prevent pollution upon decommissioning by using necessary techniques as listed below.

Design considerations for end-of-life plant decommissioning:

I. giving consideration to the environmental impact from the eventual decommissioning of the installation at the stage of designing a new plant, as forethought makes decommissioning easier, cleaner and cheaper

II. decommissioning poses environmental risks for the contamination of land (and groundwater) and generates large quantities of solid waste; preventive techniques are process-specific but general considerations may include:

(i) avoiding underground structures

(ii) incorporating features that facilitate dismantling

(iii) choosing surface finishes that are easily decontaminated

(iv) using an equipment configuration that minimises trapped chemicals and facilitates drain-down or cleaning

(v) designing flexible, self-contained units that enable phased closure

(vi) using biodegradable and recyclable materials where possible.

1.1.9. Noise

18. BAT is to reduce noise emissions from relevant sources in the iron and steel manufacturing processes by using one or more of the following techniques depending on and according to local conditions:

— implementation of a noise-reduction strategy

— enclosure of the noisy operations/units

— vibration insulation of operations/units

— internal and external lining made of impact-absorbent material

— soundproofing buildings to shelter any noisy operations involving material transformation equipment

— building noise protection walls, e.g. the construction of buildings or natural barriers, such as growing trees and bushes between the protected area and the noisy activity

— outlet silencers on exhaust stacks

— lagging ducts and final blowers which are situated in soundproof buildings

— closing doors and windows of covered areas.

1.2. *BAT Conclusions For Sinter Plants*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all sinter plants.

Air emissions

19. BAT for blending/mixing is to prevent or reduce diffuse dust emissions by agglomerating fine materials by adjusting the moisture content (see also BAT 11).

20. BAT for primary emissions from sinter plants is to reduce dust emissions from the sinter strand waste gas by means of a bag filter.

BAT for primary emissions for existing plants is to reduce dust emissions from the sinter strand waste gas by using advanced electrostatic precipitators when bag filters are not applicable.

The BAT-associated emission level for dust is < 1 – 15 mg/Nm^3 for the bag filter and < 20 – 40 mg/Nm^3 for the advanced electrostatic precipitator (which should be designed and operated to achieve these values), both determined as a daily mean value.

Bag Filter

Description

Bag filters used in sinter plants are usually applied downstream of an existing electrostatic precipitator or cyclone but can also be operated as a standalone device.

Applicability

For existing plants requirements such as space for a downstream installation to the electrostatic precipitator can be relevant. Special regard should be given to the age and the performance of the existing electrostatic precipitator.

Advanced electrostatic precipitator

Description

Advanced electrostatic precipitators are characterised by one or a combination of the following features:

— good process control

— additional electrical fields

— adapted strength of the electric field

— adapted moisture content

— conditioning with additives

— higher or variably pulsed voltages

— rapid reaction voltage

— high energy pulse superimposition

— moving electrodes

— enlarging the electrode plate distance or other features which improves the abatement efficiency.

21. BAT for primary emissions from sinter strands is to prevent or reduce mercury emissions by selecting raw materials with a low mercury content (see BAT 7) or to treat waste gases in combination with activated carbon or activated lignite coke injection.

The BAT-associated emissions level for mercury is < 0,03 – 0,05 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

22. BAT for primary emissions from sinter strands is to reduce sulphur oxide (SO_X) emissions by using one or a combination of the following techniques:

I. lowering the sulphur input by using coke breeze with a low sulphur content

II. lowering the sulphur input by minimisation of coke breeze consumption

III. lowering the sulphur input by using iron ore with a low sulphur content

IV. injection of adequate adsorption agents into the waste gas duct of the sinter strand before dedusting by bag filter (see BAT 20)

V. wet desulphurisation or regenerative activated carbon (RAC) process (with particular consideration for the prerequisites for application).

The BAT-associated emission level for sulphur oxides (SO_X) using BAT I – IV is < 350 – 500 mg/Nm^3, expressed as sulphur dioxide (SO_2) and determined as a daily mean value, the lower value being associated with BAT IV.

The BAT-associated emission level for sulphur oxides (SO_X) using BAT V is < 100 mg/Nm^3, expressed as sulphur dioxide (SO_2) and determined as a daily mean value.

Description of the *RAC process* mentioned under BAT V

Dry desulphurisation techniques are based on an adsorption of SO_2 by activated carbon. When the SO_2-laden activated carbon is regenerated, the process is called regenerated activated carbon (RAC). In this case, a high quality, expensive activated carbon type may be used and sulphuric acid (H_2SO_4) is yielded as a by-product. The bed is regenerated either with water or thermally. In some cases, for 'fine-tuning' downstream of an existing desulphurisation unit, lignite-based activated carbon is used. In this case, the SO_2-laden activated carbon is usually incinerated under controlled conditions.

The RAC system can be developed as a single-stage or a two-stage process.

In the single-stage process, the waste gases are led through a bed of activated carbon and pollutants are adsorbed by the activated carbon. Additionally, NO_X removal occurs when ammonia (NH_3) is injected into the gas stream before the catalyst bed.

In the two-stage process, the waste gases are led through two beds of activated carbon. Ammonia can be injected before the bed to reduce NO_X emissions.

Applicability of techniques mentioned under BAT V

Wet desulphurisation: The requirements of space may be of significance and may restrict the applicability. High investment and operational costs and significant cross-media effects such as slurry generation and disposal and additional waste water treatment measures, have to be taken into account. This technique is not used in Europe at the time of writing, but might be an option where environmental quality standards are unlikely to be met through the application of other techniques.

RAC: Dust abatement should be installed prior to the RAC process to reduce the inlet dust concentration. Generally the layout of the plant and space requirements are important factors when considering this technique, but especially for a site with more than one sinter strand.

High investment and operational costs, in particular when high quality, expensive, activated carbon types may be used and a sulphuric acid plant is needed, have to be taken into account. This technique is not used in Europe at the time of writing, but might be an option in new plants targeting SO_X, NO_X, dust and PCDD/F simultaneously and in circumstances where environmental quality standards are unlikely to be met through the application of other techniques.

23. BAT for primary emissions from sinter strands is to reduce total nitrogen oxides (NO_X) emissions by using one or a combination of the following techniques:

I. process integrated measures which can include:

(i) waste gas recirculation

(ii) other primary measures, such as the use of anthracite or the use of low-NO_X burners for ignition

II. end-of-pipe techniques which can include

(i) the regenerative activated carbon (RAC) process

(ii) selective catalytic reduction (SCR).

The BAT-associated emission level for nitrogen oxides (NO_X) using process integrated measures is < 500 mg/Nm^3, expressed as nitrogen dioxide (NO_2) and determined as a daily mean value.

The BAT-associated emission level for nitrogen oxides (NO_X) using RAC is < 250 mg/Nm^3 and using SCR it is < 120 mg/Nm^3, expressed as nitrogen dioxide (NO_2), related to an oxygen content of 15 % and determined as daily mean values.

Description of *waste gas recirculation* under BAT I.i

In the partial recycling of waste gas, some portions of the sinter waste gas are recirculated to the sintering process. Partial recycling of waste gas from the whole strand was primarily developed to reduce waste gas flow and thus the mass emissions of major pollutants. Additionally it can lead to a decrease in energy consumption. The application of waste gas recirculation requires special efforts to ensure that the sinter quality and productivity are not affected negatively. Special attention needs to be paid to carbon monoxide (CO) in the recirculated waste gas in order to prevent carbon monoxide poisoning of employees. Various processes have been developed such as:

— partial recycling of waste gas from the whole strand

— recycling of waste gas from the end sinter strand combined with heat exchange

— recycling of waste gas from part of the end sinter strand and use of waste gas from the sinter cooler

— recycling of parts of waste gas to other parts of the sinter strand.

Applicability of BAT I.i

The applicability of this technique is site specific. Accompanying measures to ensure that sinter quality (cold mechanical strength) and strand productivity are not negatively affected must be considered. Depending on local conditions, these can be relatively minor and easy to implement or, on the contrary, they can be of a more fundamental nature and may be costly and difficult to introduce. In any case, the operating conditions of the strand should be reviewed when this technique is introduced.

In existing plants, it may not be possible to install a partial recycling of waste gas due to space restrictions.

Important considerations in determining the applicability of this technique include:

— initial configuration of the strand (e.g. dual or single wind-box ducts, space available for new equipment and, when required, lengthening of the strand)

— initial design of the existing equipment (e.g. fans, gas cleaning and sinter screening and cooling devices)

— initial operating conditions (e.g. raw materials, layer height, suction pressure, percentage of quick lime in the mix, specific flow rate, percentage of in-plant reverts returned in the feed)

— existing performance in terms of productivity and solid fuel consumption

— basicity index of the sinter and composition of the burden at the blast furnace (e.g. percentage of sinter versus pellet in the burden, iron content of these components).

Applicability of *other primary measures* under BAT I.ii

The use of anthracite depends on the availability of anthracites with a lower nitrogen content compared to coke breeze.

Description and applicability of the *RAC process* under BAT II.i see BAT 22.

Applicability of the *SCR* process under BAT II.ii

SCR can be applied within a high dust system, a low dust system and as a clean gas system. Until now, only clean gas systems (after dedusting and desulphurisation) have been applied at sinter plants. It is essential that the gas is low in dust (< 40 mg dust/Nm^3) and heavy metals, because they can make the surface of the catalyst ineffective. Additionally, desulphurisation prior to the catalyst might be required. Another prerequisite is a minimum off-gas temperature of about 300 °C. This requires an energy input.

The high investment and operational costs, the need for catalyst revitalisation, NH_3 consumption and slip, the accumulation of explosive ammonium nitrate (NH_4NO_3), the formation of corrosive SO_3 and the additional energy required for reheating which can reduce the possibilities for recovery of sensible heat from the sinter process, all may constrain the applicability. This technique might be an option where environmental quality standards are unlikely to be met through the application of other techniques.

24. BAT for primary emissions from sinter strands is to prevent and/or reduce emissions of polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) by using one or a combination of the following techniques:

I. avoidance of raw materials which contain polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) or their precursors as much as possible (see BAT 7)

II. suppression of polychlorinated dibenzodioxins/furans (PCDD/F) formation by addition of nitrogen compounds

III. waste gas recirculation (see BAT 23 for description and applicability).

25. BAT for primary emissions from sinter strands is to reduce emissions of polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) by the injection of adequate adsorption agents into the waste gas duct of the sinter strand before dedusting with a bag filter or advanced electrostatic precipitators when bag filters are not applicable (see BAT 20).

The BAT- associated emission level for polychlorinated dibenzodioxins/furans (PCDD/F) is < 0,05 – 0,2 ng I-TEQ/Nm^3 for the bag filter and < 0,2 – 0,4 ng-I-TEQ/Nm^3 for the advanced electrostatic precipitator, both determined for a 6 – 8 hour random sample under steady-state conditions.

26. BAT for secondary emissions from sinter strand discharge, sinter crushing, cooling, screening and conveyor transfer points is to prevent dust emissions and/or to achieve an efficient extraction and subsequently to reduce dust emissions by using a combination of the following techniques:

I. hooding and/or enclosure

II. an electrostatic precipitator or a bag filter.

The BAT-associated emission level for dust is < 10 mg/Nm^3 for the bag filter and < 30 mg/Nm^3 for the electrostatic precipitator, both determined as a daily mean value.

Water and waste water

27. BAT is to minimise water consumption in sinter plants by recycling cooling water as much as possible unless once-through cooling systems are used.

28. BAT is to treat the effluent water from sinter plants where rinsing water is used or where a wet waste gas treatment system is applied, with the exception of cooling water prior to discharge by using a combination of the following techniques:

I. heavy metal precipitation

II. neutralisation

III. sand filtration.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids	< 30 mg/l
— chemical oxygen demand (COD [1])	< 100 mg/l
— heavy metals	< 0,1 mg/l

(sum of arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), nickel (Ni), lead (Pb), and zinc (Zn)).

Production residues

29. BAT is to prevent waste generation within sinter plants by using one or a combination of the following techniques (see BAT 8):

I. selective on-site recycling of residues back to the sinter process by excluding heavy metals, alkali or chloride-enriched fine dust fractions (e.g. the dust from the last electrostatic precipitator field)

II. external recycling whenever on-site recycling is hampered.

BAT is to manage in a controlled manner sinter plant process residues which can neither be avoided nor recycled.

30. BAT is to recycle residues that may contain oil, such as dust, sludge and mill scale which contain iron and carbon from the sinter strand and other processes in the integrated steelworks, as much as possible back to the sinter strand, taking into account the respective oil content.

[1] In some cases, TOC is measured instead of COD (in order to avoid $HgCl_2$ used in the analysis for COD). The correlation between COD and TOC should be elaborated for each sinter plant case by case. The COD/TOC ratio may vary approximately between two and four.

31. BAT is to lower the hydrocarbon content of the sinter feed by appropriate selection and pretreatment of the recycled process residues.

In all cases, the oil content of the recycled process residues should be < 0,5 % and the content of the sinter feed < 0,1 %.

Description

The input of hydrocarbons can be minimised, especially by the reduction of the oil input. Oil enters the sinter feed mainly by addition of mill scale. The oil content of mill scales can vary significantly, depending on their origin.

Techniques to minimise oil input via dusts and mill scale include the following:

— limiting input of oil by segregating and then selecting only those dusts and mill scale with a low oil content

— the use of 'good housekeeping' techniques in the rolling mills can result in a substantial reduction in the contaminant oil content of mill scale

— de-oiling of mill scale by:

  — heating the mill scale to approximately 800 °C, the oil hydrocarbons are volatilised and clean mill scale is yielded; the volatilised hydrocarbons can be combusted.

  — extracting oil from the mill scale using a solvent.

Energy

32. BAT is to reduce thermal energy consumption within sinter plants by using one or a combination of the following techniques:

I. recovering sensible heat from the sinter cooler waste gas

II. recovering sensible heat, if feasible, from the sintering grate waste gas

III. maximising the recirculation of waste gases to use sensible heat (see BAT 23 for description and applicability).

Description

Two kinds of potentially reusable waste energies are discharged from the sinter plants:

— the sensible heat from the waste gases from the sintering machines

— the sensible heat of the cooling air from the sinter cooler.

Partial waste gas recirculation is a special case of heat recovery from waste gases from sintering machines and is dealt with in BAT 23. The sensible heat is transferred directly back to the sinter bed by the hot recirculated gases. At the time of writing (2010), this is the only practical method of recovering heat from the waste gases.

The sensible heat in the hot air from the sinter cooler can be recovered by one or more of the following ways:

— steam generation in a waste heat boiler for use in the iron and steel works

— hot water generation for district heating

— preheating combustion air in the ignition hood of the sinter plant

— preheating the sinter raw mix

— use of the sinter cooler gases in a waste gas recirculation system.

Applicability

At some plants, the existing configuration may make costs of heat recovery from the sinter waste gases or sinter cooler waste gas very high.

The recovery of heat from the waste gases by means of a heat exchanger would lead to unacceptable condensation and corrosion problems.

1.3. *BAT Conclusions For Pelletisation Plants*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all pelletisation plants.

Air emissions

33. BAT is to reduce the dust emissions in the waste gases from

— the raw materials pre-treatment, drying, grinding, wetting, mixing and the balling;

— from the induration strand; and

— from the pellet handling and screening

by using one or a combination of the following techniques:

I. an electrostatic precipitator

II. a bag filter

III. a wet scrubber

The BAT-associated emission level for dust is < 20 mg/Nm^3 for the crushing, grinding and drying and $< 10 - 15$ mg/Nm^3 for all other process steps or in cases where all waste gases are treated together, all determined as daily mean values.

34. BAT is to reduce the sulphur oxides (SO_X), hydrogen chloride (HCl) and hydrogen fluoride (HF) emissions from the induration strand waste gas by using one of the following techniques:

I. a wet scrubber

II. semi-dry absorption with a subsequent dedusting system

The BAT-associated emission levels, determined as daily mean values, for these compounds are:

— sulphur oxides (SO_X), expressed as sulphur dioxide (SO_2)	$< 30 - 50$ mg/Nm^3
— hydrogen fluoride (HF)	$< 1 - 3$ mg/Nm^3
— hydrogen chloride (HCl)	$< 1 - 3$ mg/Nm^3.

35. BAT is to reduce NO_X emissions from the drying and grinding section and induration strand waste gases by applying process-integrated techniques.

Description

Plant design through tailor-made solutions should be optimised for low nitrogen oxides (NO_X) emissions from all firing sections. The reduction of the formation of thermal NO_X can be achieved by lowering the (peak) temperature in the burners and reducing the excess oxygen in the combustion air. Additionally, lower NO_X emissions can be achieved by a combination of low energy use and low nitrogen content in the fuel (coal and oil).

36. BAT for existing plants is to reduce NO_X emissions from the drying and grinding section and induration strand waste gases by applying one of the following techniques:

I. selective catalytic reduction (SCR) as an end-of-pipe technique

II. any other technique with a NO_X reduction efficiency of at least 80 %.

Applicability

For existing plants, both straight grate and grate kiln systems, it is difficult to obtain the operating conditions necessary to suit an SCR reactor. Due to high costs, these end-of-pipe techniques should only be considered in circumstances where environmental quality standards are otherwise not likely to be met.

37. BAT for new plants is to reduce NO_X emissions from the drying and grinding section and induration strand waste gases by applying selective catalytic reduction (SCR) as an end-of-pipe technique.

Water and waste water

38. BAT for pelletisation plants is to minimise the water consumption and discharge of scrubbing, wet rinsing and cooling water and reuse it as much as possible.

39. BAT for pelletisation plants is to treat the effluent water prior to discharge by using a combination of the following techniques:

I. neutralisation

II. flocculation

III. sedimentation

IV. sand filtration

V. heavy metal precipitation.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids	< 50 mg/l
— chemical oxygen demand (COD [1])	< 160 mg/l
— Kjeldahl nitrogen	< 45 mg/l
— heavy metals	< 0,55 mg/l

(sum of arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), nickel (Ni), lead (Pb), zinc (Zn)).

Production residues

40. BAT is to prevent waste generation from pelletisation plants by effective on-site recycling or the reuse of residues (i.e. undersized green and heat-treated pellets)

BAT is to manage in a controlled manner pellet plant process residues, i.e. sludge from waste water treatment, which can neither be avoided nor recycled.

Energy

41. BAT is to reduce/minimise thermal energy consumption in pelletisation plants by using one or a combination of the following techniques:

I. process integrated reuse of sensible heat as far as possible from the different sections of the induration strand

II. using surplus waste heat for internal or external heating networks if there is demand from a third party.

[1] In some cases, TOC is measured instead of COD (in order to avoid $HgCl_2$ used in the analysis for COD). The correlation between COD and TOC should be elaborated for each pelletisation plant case by case. The COD/TOC ratio may vary approximately between two and four.

Description

Hot air from the primary cooling section can be used as secondary combustion air in the firing section. In turn, the heat from the firing section can be used in the drying section of the induration strand. Heat from the secondary cooling section can also be used in the drying section.

Excess heat from the cooling section can be used in the drying chambers of the drying and grinding unit. The hot air is transported through an insulated pipeline called a 'hot air recirculation duct'.

Applicability

Recovery of sensible heat is a process integrated part of pelletisation plants. The 'hot air recirculation duct' can be applied at existing plants with a comparable design and a sufficient supply of sensible heat.

The cooperation and agreement of a third party may not be within the control of the operator, and therefore may not be within the scope of the permit.

1.4. *BAT Conclusions For Coke Oven Plants*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all coke oven plants.

Air emissions

42. BAT for coal grinding plants (coal preparation including crushing, grinding, pulverising and screening) is to prevent or reduce dust emissions by using one or a combination of the following techniques:

I. building and/or device enclosure (crusher, pulveriser, sieves) and

II. efficient extraction and use of a subsequent dry dedusting systems.

The BAT-associated emission level for dust is < 10 – 20 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

43. BAT for storage and handling of pulverised coal is to prevent or reduce diffuse dust emissions by using one or a combination of the following techniques:

I. storing pulverised materials in bunkers and warehouses

II. using closed or enclosed conveyors

III. minimising the drop heights depending on the plant size and construction

IV. reducing emissions from charging of the coal tower and the charging car

V. using efficient extraction and subsequent dedusting.

When using BAT V, the BAT-associated emission level for dust is < 10 – 20 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

44. BAT is to charge coke oven chambers with emission-reduced charging systems.

Description

From an integrated point of view, 'smokeless' charging or sequential charging with double ascension pipes or jumper pipes are the preferred types, because all gases and dust are treated as part of the coke oven gas treatment.

If, however, the gases are extracted and treated outside the coke oven, charging with a land-based treatment of the extracted gases is the preferred method. Treatment should consist of an efficient extraction of the emissions with subsequent combustion to reduce organic compounds and the use of a bag filter to reduce particulates.

The BAT-associated emission level for dust from coal charging systems with land-based treatment of extracted gases is < 5 g/t coke equivalent to < 50 mg/Nm^3, as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

The duration associated with BAT of visible emissions from charging is < 30 seconds per charge as a monthly average using a monitoring method described in BAT 46.

45. BAT for coking is to extract the coke oven gas (COG) during coking as much as possible.

46. BAT for coke plants is to reduce the emissions through achieving continuous undisrupted coke production by using the following techniques:

I. extensive maintenance of oven chambers, oven doors and frame seals, ascension pipes, charging holes and other equipment (a systematic programme should be carried out by specially-trained detection and maintenance personnel)

II. avoiding strong temperature fluctuations

III. comprehensive observation and monitoring of the coke oven

IV. cleaning of doors, frame seals, charging holes, lids and ascension pipes after handling (applicable at new and, in some cases, existing plants)

V. maintaining a free gas-flow in the coke ovens

VI. adequate pressure regulation during coking and application of spring-loaded flexible sealing doors or knife-edged doors (in cases of ovens ≤ 5 m high and in good working order)

VII. using water-sealed ascension pipes to reduce visible emissions from the whole apparatus which provides a passage from the coke oven battery to the collecting main, gooseneck and stationary jumper pipes

VIII. luting charging hole lids with a clay suspension (or other suitable sealing material), to reduce visible emissions from all holes

IX. ensuring complete coking (avoiding green coke pushes) by application of adequate techniques

X. installing larger coke oven chambers (applicable to new plants or in some cases of a complete replacement of the plant on the old foundations)

XI. where possible, using variable pressure regulation to oven chambers during coking (applicable to new plants and can be an option for existing plants; the possibility of installing this technique in existing plants should be assessed carefully and is subject to the individual situation of every plant).

The percentage of visible emissions from all doors associated with BAT is < 5 – 10 %.

The percentage of visible emissions for all source types associated with BAT VII and BAT VIII is < 1 %.

The percentages are related to the frequency of any leaks compared to the total number of doors, ascension pipes or charging hole lids as a monthly average using a monitoring method as described below.

For the estimation of diffuse emissions from coke ovens the following methods are in use:

— the EPA 303 method

— the DMT (Deutsche Montan Technologie GmbH) methodology

— the methodology developed by BCRA (British Carbonisation Research Association).

— the methodology applied in the Netherlands, based on counting visible leaks of the ascension pipes and charging holes, while excluding visible emissions due to normal operations (coal charging, coke pushing).

47. BAT for the gas treatment plant is to minimise fugitive gaseous emissions by using the following techniques:

I. minimising the number of flanges by welding piping connections wherever possible

II. using appropriate sealings for flanges and valves

III. using gas-tight pumps (e.g. magnetic pumps)

IV. avoiding emissions from pressure valves in storage tanks by:

— connecting the valve outlet to the coke oven gas (COG) collecting main or

— collecting the gases and subsequent combustion.

Applicability

The techniques can be applied to both new and existing plants. In new plants, a gas tight design might be easier to achieve than in existing plants.

48. BAT is to reduce the sulphur content of the coke oven gas (COG) by using one of the following techniques:

I. desulphurisation by absorption systems

II. wet oxidative desulphurisation.

The residual hydrogen sulphide (H_2S) concentrations associated with BAT, determined as daily mean averages, are < 300 – 1 000 mg/Nm^3 in the case of using BAT I (the higher values being associated with higher ambient temperature and the lower values being associated with lower ambient temperature) and < 10 mg/Nm^3 in the case of using BAT II.

49. BAT for the coke oven underfiring is to reduce the emissions by using the following techniques:

I. preventing leakage between the oven chamber and the heating chamber by means of regular coke oven operation

II. repairing leakage between the oven chamber and the heating chamber (only applicable to existing plants)

III. incorporating low-nitrogen oxides (NO_X) techniques in the construction of new batteries, such as staged combustion and the use of thinner bricks and refractory with a better thermal conductivity (only applicable to new plants)

IV. using desulphurised coke oven gas (COG) process gases.

The BAT-associated emission levels, determined as daily mean values and relating to an oxygen content of 5 % are:

— sulphur oxides (SO_X), expressed as sulphur dioxide (SO_2) < 200 – 500 mg/Nm^3

— dust < 1 – 20 mg/Nm^3 ([1])

— nitrogen oxides (NO_X), expressed as nitrogen dioxide (NO_2) < 350 – 500 mg/Nm^3 for new or substantially revamped plants (less than 10 years old) and 500 – 650 mg/Nm^3 for older plants with well maintained batteries and incorporated low- nitrogen oxides (NO_X) techniques.

50. BAT for coke pushing is to reduce dust emissions by using the following techniques:

I. extraction by means of an integrated coke transfer machine equipped with a hood

II. using land-based extraction gas treatment with a bag filter or other abatement systems

III. using a one point or a mobile quenching car.

The BAT-associated emission level for dust from coke pushing is < 10 mg/Nm^3 in the case of bag filters and of < 20 mg/Nm^3 in other cases, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Applicability

At existing plants, lack of space may constrain the applicability.

([1]) The lower end of the range has been defined based on the performance of one specific plant achieved under real operating conditions by the BAT obtaining the best environmental performance.

51. BAT for coke quenching is to reduce dust emissions by using one of the following techniques:

I. using coke dry quenching (CDQ) with the recovery of sensible heat and the removal of dust from charging, handling and screening operations by means of a bag filter

II. using emission-minimised conventional wet quenching

III. using coke stabilisation quenching (CSQ).

The BAT-associated emission levels for dust, determined as the average over the sampling period, are:

— < 20 mg/Nm^3 in case of coke dry quenching

— < 25 g/t coke in case of emission minimised conventional wet quenching ([1])

— < 10 g/t coke in case of coke stabilisation quenching ([2]).

Description of BAT I

For the continuous operation of coke dry quenching plants, there are two options. In one case, the coke dry quenching unit comprises two to up to four chambers. One unit is always on stand by. Hence no wet quenching is necessary but the coke dry quenching unit needs an excess capacity against the coke oven plant with high costs. In the other case, an additional wet quenching system is necessary.

In case of modifying a wet quenching plant to a dry quenching plant, the existing wet quenching system can be retained for this purpose. Such a coke dry quenching unit has no excess processing capacity against the coke oven plant.

Applicability of BAT II

Existing quenching towers can be equipped with emissions reduction baffles. A minimum tower height of at least 30 m is necessary in order to ensure sufficient draught conditions.

Applicability of BAT III

As the system is larger than that necessary for conventional quenching, lack of space at the plant may be a constraint.

52. BAT for coke grading and handling is to prevent or reduce dust emissions by using the following techniques in combination:

I. use of building or device enclosures

II. efficient extraction and subsequent dry dedusting.

The BAT-associated emission level for dust is < 10 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Water and waste water

53. BAT is to minimise and reuse quenching water as much as possible.

54. BAT is to avoid the reuse of process water with a significant organic load (like raw coke oven waste water, waste water with a high content of hydrocarbons, etc.) as quenching water.

55. BAT is to pretreat waste water from the coking process and coke oven gas (COG) cleaning prior to discharge to a waste water treatment plant by using one or a combination of the following techniques:

I. using efficient tar and polycyclic aromatic hydrocarbons (PAH) removal by using flocculation and subsequent flotation, sedimentation and filtration individually or in combination

II. using efficient ammonia stripping by using alkaline and steam.

([1]) This level is based on the use of the non-isokinetic Mohrhauer method (former VDI 2303)
([2]) This level is based on the use of an isokinetic sampling method according to VDI 2066

56. BAT for pretreated waste water from the coking process and coke oven gas (COG) cleaning is to use biological waste water treatment with integrated denitrification/nitrification stages.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample and referring only to single coke oven water treatment plants, are:

— chemical oxygen demand (COD [1])	< 220 mg/l
— biological oxygen demand for 5 days (BOD_5)	< 20 mg/l
— sulphides, easily released [2]	< 0,1 mg/l
— thiocyanate (SCN^-)	< 4 mg/l
— cyanide (CN^-), easily released [3]	< 0,1 mg/l
— polycyclic aromatic hydrocarbons (PAH) (sum of Fluoranthene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Indeno[1,2,3-cd]pyrene and Benzo[g,h,i]perylene)	< 0,05 mg/l
— phenols	< 0,5 mg/l
— sum of ammonia-nitrogen (NH_4^+-N), nitrate-nitrogen (NO_3^--N) and nitrite-nitrogen (NO_2^--N)	< 15 – 50 mg/l.

Regarding the sum of ammonia-nitrogen (NH_4^+-N), nitrate-nitrogen (NO_3^--N) and nitrite-nitrogen (NO_2^--N), values of < 35 mg/l are usually associated with the application of advanced biological waste water treatment plants with predenitrification/nitrification and post-denitrification.

Production residues

57. BAT is to recycle production residues such as tar from the coal water and still effluent, and surplus activated sludge from the waste water treatment plant back to the coal feed of the coke oven plant.

Energy

58. BAT is to use the extracted coke oven gas (COG) as a fuel or reducing agent or for the production of chemicals.

1.5. *BAT Conclusions For Blast Furnaces*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all blast furnaces.

Air emissions

59. BAT for displaced air during loading from the storage bunkers of the coal injection unit is to capture dust emissions and perform subsequent dry dedusting.

The BAT-associated emission level for dust is < 20 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

60. BAT for burden preparation (mixing, blending) and conveying is to minimise dust emissions and, where relevant, extraction with subsequent dedusting by means of an electrostatic precipitator or bag filter.

(1) In some cases, TOC is measured instead of COD (in order to avoid $HgCl_2$ used in the analysis for COD). The correlation between COD and TOC should be elaborated for each coke oven plant case by case. The COD/TOC ratio may vary approximately between two and four.

(2) This level is based on the use of the DIN 38405 D 27 or any other national or international standard that ensures the provision of data of an equivalent scientific quality.

(3) This level is based on the use of the DIN 38405 D 13-2 or any other national or international standard that ensures the provision of data of an equivalent scientific quality.

61. BAT for casting house (tap holes, runners, torpedo ladles charging points, skimmers) is to prevent or reduce diffuse dust emissions by using the following techniques:

I. covering the runners

II. optimising the capture efficiency for diffuse dust emissions and fumes with subsequent off-gas cleaning by means of an electrostatic precipitator or bag filter

III. fume suppression using nitrogen while tapping, where applicable and where no collecting and dedusting system for tapping emissions is installed.

When using BAT II, the BAT-associated emission level for dust is < 1 – 15 mg/Nm^3, determined as a daily mean value.

62. BAT is to use tar-free runner linings.

63. BAT is to minimise the release of blast furnace gas during charging by using one or a combination of the following techniques:

I. bell-less top with primary and secondary equalising

II. gas or ventilation recovery system

III. use of blast furnace gas to pressurise the top bunkers.

Applicability of BAT II

Applicable for new plants. Applicable for existing plants only where the furnace has a bell-less charging system. It is not applicable to plants where gases other than blast furnace gas (e.g. nitrogen) are used to pressurise the furnace top bunkers.

64. BAT is to reduce dust emissions from the blast furnace gas by using one or a combination of the following techniques:

I. using dry prededusting devices such as:

(i) deflectors

(ii) dust catchers

(iii) cyclones

(iv) electrostatic precipitators.

II. subsequent dust abatement such as:

(i) hurdle-type scrubbers

(ii) venturi scrubbers

(iii) annular gap scrubbers

(iv) wet electrostatic precipitators

(v) disintegrators.

For cleaned blast furnace (BF) gas, the residual dust concentration associated with BAT is < 10 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

65. BAT for hot blast stoves is to reduce emissions by using desulphurised and dedusted surplus coke oven gas, dedusted blast furnace gas, dedusted basic oxygen furnace gas and natural gas, individually or in combination.

The BAT-associated emission levels, determined as daily mean values related to an oxygen content of 3 %, are:

— sulphur oxides (SO_x) expressed as sulphur dioxide (SO_2) < 200 mg/Nm^3

— dust < 10 mg/Nm^3

— nitrogen oxides (NO_x), expressed as nitrogen dioxide (NO_2) < 100 mg/Nm^3.

Water and waste water

66. BAT for water consumption and discharge from blast furnace gas treatment is to minimise and to reuse scrubbing water as much as possible, e.g. for slag granulation, if necessary after treatment with a gravel-bed filter.

67. BAT for treating waste water from blast furnace gas treatment is to use flocculation (coagulation) and sedimentation and the reduction of easily released cyanide, if necessary.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids	< 30 mg/l
— iron	< 5 mg/l
— lead	< 0,5 mg/l
— zinc	< 2 mg/l
— cyanide (CN^-), easily released [1]	< 0,4 mg/l.

Production residues

68. BAT is to prevent waste generation from blast furnaces by using one or a combination of the following techniques:

I. appropriate collection and storage to facilitate a specific treatment

II. on-site recycling of coarse dust from the blast furnace (BF) gas treatment and dust from the cast house dedusting, with due regard for the effect of emissions from the plant where it is recycled

III. hydrocyclonage of sludge with subsequent on-site recycling of the coarse fraction (applicable whenever wet dedusting is applied and where the zinc content distribution in the different grain sizes allows a reasonable separation)

IV. slag treatment, preferably by means of granulation (where market conditions allow for it), for the external use of slag (e.g. in the cement industry or for road construction).

BAT is to manage in a controlled manner blast furnace process residues which can neither be avoided nor recycled.

69. BAT for minimising slag treatment emissions is to condense fume if odour reduction is required.

Resource management

70. BAT for resource management of blast furnaces is to reduce coke consumption by directly injected reducing agents, such as pulverised coal, oil, heavy oil, tar, oil residues, coke oven gas (COG), natural gas and wastes such as metallic residues, used oils and emulsions, oily residues, fats and waste plastics individually or in combination.

Applicability

Coal injection: The method is applicable to all blast furnaces equipped with pulverised coal injection and oxygen enrichment.

Gas injection: Tuyère injection of coke oven gas (COG) is highly dependent upon the availability of the gas that may be effectively used elsewhere in the integrated steelworks.

[1] This level is based on the use of the DIN 38405 D 13-2 or any other national or international standard that ensures the provision of data of an equivalent scientific quality.

Plastic injection: It should be noted that this technique is highly dependent on the local circumstances and market conditions. Plastics can contain Cl and heavy metals like Hg, Cd, Pb and Zn. Depending on the composition of the wastes used (e.g. shredder light fraction), the amount of Hg, Cr, Cu, Ni and Mo in the BF gas may increase.

Direct injection of used oils, fats and emulsions as reducing agents and of solid iron residues: The continuous operation of this system is reliant on the logistical concept of delivery and the storage of residues. Also, the conveying technology applied is of particular importance for a successful operation.

Energy

71. BAT is to maintain a smooth, continuous operation of the blast furnace at a steady state to minimise releases and to reduce the likelihood of burden slips.

72. BAT is to use the extracted blast furnace gas as a fuel.

73. BAT is to recover the energy of top blast furnace gas pressure where sufficient top gas pressure and low alkali concentrations are present.

Applicability

Top gas pressure recovery can be applied at new plants and in some circumstances at existing plants, albeit with more difficulties and additional costs. Fundamental to the application of this technique is an adequate top gas pressure in excess of 1.5 bar gauge.

At new plants, the top gas turbine and the blast furnace (BF) gas cleaning facility can be adapted to each other in order to achieve a high efficiency of both scrubbing and energy recovery.

74. BAT is to preheat the hot blast stove fuel gases or combustion air using the waste gas of the hot blast stove and to optimise the hot blast stove combustion process.

Description

For optimisation of the energy efficiency of the hot stove, one or a combination of the following techniques can be applied:

— the use of a computer-aided hot stove operation

— preheating of the fuel or combustion air in conjunction with insulation of the cold blast line and waste gas flue

— use of more suitable burners to improve combustion

— rapid oxygen measurement and subsequent adaptation of combustion conditions.

Applicability

The applicability of fuel preheating depends on the efficiency of the stoves as this determines the waste gas temperature (e.g. at waste gas temperatures below 250 °C, heat recovery may not be a technically or economically viable option).

The implementation of computer-aided control could require the construction of a fourth stove in the case of blast furnaces with three stoves (if possible) in order to maximise benefits.

1.6. *BAT Conclusions For Basic Oxygen Steelmaking And Casting*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all basic oxygen steelmaking and casting.

Air emissions

75. BAT for basic oxygen furnace (BOF) gas recovery by suppressed combustion is to extract the BOF gas during blowing as much as possible and to clean it by using the following techniques in combination:

I. use of a suppressed combustion process

II. prededusting to remove coarse dust by means of dry separation techniques (e.g. deflector, cyclone) or wet separators

III. dust abatement by means of:

(i) dry dedusting (e.g. electrostatic precipitator) for new and existing plants

(ii) wet dedusting (e.g. wet electrostatic precipitator or scrubber) for existing plants.

The residual dust concentrations associated with BAT, after buffering the BOF gas, are:

— 10 – 30 mg/Nm^3 for BAT III.i

— < 50 mg/Nm^3 for BAT III.ii.

76. BAT for basic oxygen furnace (BOF) gas recovery during oxygen blowing in the case of full combustion is to reduce dust emissions by using one of the following techniques:

I. dry dedusting (e.g. ESP or bag filter) for new and existing plants

II. wet dedusting (e.g. wet ESP or scrubber) for existing plants.

The BAT-associated emission levels for dust, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour), are:

— 10 – 30 mg/Nm^3 for BAT I

— < 50 mg/Nm^3 for BAT II.

77. BAT is to minimise dust emissions from the oxygen lance hole by using one or a combination of the following techniques:

I. covering the lance hole during oxygen blowing

II. inert gas or steam injection into the lance hole to dissipate the dust

III. use of other alternative sealing designs combined with lance cleaning devices.

78. BAT for secondary dedusting, including the emissions from the following processes:

— reladling of hot metal from the torpedo ladle (or hot metal mixer) to the charging ladle

— hot metal pretreatment (i.e. the preheating of vessels, desulphurisation, dephosphorisation, deslagging, hot metal transfer processes and weighing)

— BOF-related processes like the preheating of vessels, slopping during oxygen blowing, hot metal and scrap charging, tapping of liquid steel and slag from BOF and

— secondary metallurgy and continuous casting,

is to minimise dust emissions by means of process integrated techniques, such as general techniques to prevent or control diffuse or fugitive emissions, and by using appropriate enclosures and hoods with efficient extraction and a subsequent off-gas cleaning by means of a bag filter or an ESP.

The overall average dust collection efficiency associated with BAT is > 90 %

The BAT-associated emission level for dust, as a daily mean value, for all dedusted off-gases is < 1 – 15 mg/Nm^3 in the case of bag filters and < 20 mg/Nm^3 in the case of electrostatic precipitators.

If the emissions from hot metal pretreatment and the secondary metallurgy are treated separately, the BAT-associated emission level for dust, as a daily mean value, is < 1 – 10 mg/Nm^3 for bag filters and < 20 mg/Nm^3 for electrostatic precipitators.

Description

General techniques to prevent diffuse and fugitive emissions from the relevant BOF process secondary sources include:

— independent capture and use of dedusting devices for each subprocess in the BOF shop

— correct management of the desulphurisation installation to prevent air emissions

— total enclosure of the desulphurisation installation

— maintaining the lid on when the hot metal ladle is not in use and the cleaning of hot metal ladles and removal of skulls on a regular basis or alternatively apply a roof extraction system

— maintaining the hot metal ladle in front of the converter for approximately two minutes after putting the hot metal into the converter if a roof extraction system is not applied

— computer control and optimisation of the steelmaking process, e.g. so that slopping (i.e. when the slag foams to such an extent that it flows out of the vessel) is prevented or reduced

— reduction of slopping during tapping by limiting elements that cause slopping and the use of anti-slopping agents

— closure of doors from the room around the converter during oxygen blowing

— continuous camera observation of the roof for visible emission

— the use of a roof extraction system.

Applicability

In existing plants, the design of the plant may restrict the possibilities for proper evacuation.

79. BAT for on-site slag processing is to reduce dust emissions by using one or a combination of the following techniques:

I. efficient extraction of the slag crusher and screening devices with subsequent off-gas cleaning, if relevant

II. transport of untreated slag by shovel loaders

III. extraction or wetting of conveyor transfer points for broken material

IV. wetting of slag storage heaps

V. use of water fogs when broken slag is loaded.

The BAT-associated emission level for dust in the case of using BAT I is < 10 – 20 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Water and waste water

80. BAT is to prevent or reduce water use and waste water emissions from primary dedusting of basic oxygen furnace (BOF) gas by using one of the following techniques as set out in BAT 75 and BAT 76:

— dry dedusting of basic oxygen furnace (BOF) gas;

— minimising scrubbing water and reusing it as much as possible(e.g. for slag granulation) in case wet dedusting is applied.

81. BAT is to minimise the waste water discharge from continuous casting by using the following techniques in combination:

I. the removal of solids by flocculation, sedimentation and/or filtration

II. the removal of oil in skimming tanks or any other effective device

III. the recirculation of cooling water and water from vacuum generation as much as possible.

The BAT-associated emission levels, based on a qualified random sample or a 24-hour composite sample, for waste water from continuous casting machines are:

— suspended solids < 20 mg/l

— iron < 5 mg/l

— zinc < 2 mg/l

— nickel < 0,5 mg/l

— total chromium < 0,5 mg/l

— total hydrocarbons < 5 mg/l.

Production residues

82. BAT is to prevent waste generation by using one or a combination of the following techniques (see BAT 8):

I. appropriate collection and storage to facilitate a specific treatment

II. on-site recycling of dust from basic oxygen furnace (BOF) gas treatment, dust from secondary dedusting and mill scale from continuous casting back to the steelmaking processes with due regard for the effect of emissions from the plant where they are recycled

III. on-site recycling of BOF slag and BOF slag fines in various applications

IV. slag treatment where market conditions allow for the external use of slag (e.g. as an aggregate in materials or for construction)

V. use of filter dusts and sludge for external recovery of iron and non-ferrous metals such as zinc in the non-ferrous metals industry

VI. use of a settling tank for sludge with the subsequent recycling of the coarse fraction in the sinter/blast furnace or cement industry when grain size distribution allows for a reasonable separation.

Applicability of BAT V

Dust hot briquetting and recycling with recovery of high zinc concentrated pellets for external reuse is applicable when a dry electrostatic precipitation is used to clean the BOF gas. Recovery of zinc by briquetting is not applicable in wet dedusting systems because of unstable sedimentation in the settling tanks caused by the formation of hydrogen (from a reaction of metallic zinc and water). Due to these safety reasons, the zinc content in the sludge should be limited to 8 – 10 %.

BAT is to manage in a controlled manner basic oxygen furnace process residues which can neither be avoided nor recycled.

Energy

83. BAT is to collect, clean and buffer BOF gas for subsequent use as a fuel.

Applicability

In some cases, it may not be economically feasible or, with regard to appropriate energy management, not feasible to recover the BOF gas by suppressed combustion. In these cases, the BOF gas may be combusted with the generation of steam. The kind of combustion (full or suppressed combustion) depends on local energy management.

84. BAT is to reduce energy consumption by using ladle-lid systems.

Applicability

The lids can be very heavy as they are made out of refractory bricks and therefore the capacity of the cranes and the design of the whole building may constrain the applicability in existing plants. There are different technical designs for implementing the system into the particular conditions of a steel plant.

85. BAT is to optimise the process and reduce energy consumption by using a direct tapping process after blowing.

Description

Direct tapping normally requires expensive facilities like sub-lance or DROP IN sensor-systems to tap without waiting for a chemical analysis of the samples taken (direct tapping). Alternatively, a new technique has been developed to achieve direct tapping without such facilities. This technique requires a lot of experience and developmental work. In practice, the carbon is directly blown down to 0,04 % and simultaneously the bath temperature decreases to a reasonably low target. Before tapping, both the temperature and oxygen activity are measured for further actions.

Applicability

A suitable hot metal analyser and slag stopping facilities are required and the availability of a ladle furnace facilitates implementation of the technique.

86. BAT is to reduce energy consumption by using continuous near net shape strip casting, if the quality and the product mix of the produced steel grades justify it.

Description

Near net shape strip casting means the continuous casting of steel to strips with thicknesses of less than 15 mm. The casting process is combined with the direct hot rolling, cooling and coiling of the strips without an intermediate reheating furnace used for conventional casting techniques, e.g. continuous casting of slabs or thin slabs. Therefore, strip casting represents a technique for producing flat steel strips of different widths and thicknesses of less than 2 mm.

Applicability

The applicability depends on the produced steel grades (e.g. heavy plates cannot be produced with this process) and on the product portfolio (product mix) of the individual steel plant. In existing plants, the applicability may be constrained by the layout and the available space as e.g. retrofitting with a strip caster requires approximately 100 m in length.

1.7. *BAT Conclusions For Electric Arc Furnace Steelmaking And Casting*

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all electric arc furnace steelmaking and casting.

Air emissions

87. BAT for the electric arc furnace (EAF) process is to prevent mercury emissions by avoiding, as much as possible, raw materials and auxiliaries which contain mercury (see BAT 6 and 7).

88. BAT for the electric arc furnace (EAF) primary and secondary dedusting (including scrap preheating, charging, melting, tapping, ladle furnace and secondary metallurgy) is to achieve an efficient extraction of all emission sources by using one of the techniques listed below and to use subsequent dedusting by means of a bag filter:

I. a combination of direct off-gas extraction (4th or 2nd hole) and hood systems

II. direct gas extraction and doghouse systems

III. direct gas extraction and total building evacuation (low-capacity electric arc furnaces (EAF) may not require direct gas extraction to achieve the same extraction efficiency).

The overall average collection efficiency associated with BAT is > 98 %.

The BAT-associated emission level for dust is < 5 mg/Nm^3, determined as a daily mean value.

The BAT-associated emission level for mercury is < 0,05 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least four hours).

89. BAT for the electric arc furnace (EAF) primary and secondary dedusting (including scrap preheating, charging, melting, tapping, ladle furnace and secondary metallurgy) is to prevent and reduce polychlorinated dibenzodioxins/furans (PCDD/F) and polychlorinated biphenyls (PCB) emissions by avoiding, as much as possible, raw materials which contain PCDD/F and PCB or their precursors (see BAT 6 and 7) and using one or a combination of the following techniques, in conjunction with an appropriate dust removal system:

I. appropriate post-combustion

II. appropriate rapid quenching

III. injection of adequate adsorption agents into the duct before dedusting.

The BAT-associated emission level for polychlorinated dibenzodioxins/furans (PCDD/F) is < 0,1 ng I-TEQ/Nm^3, based on a 6 – 8 hour random sample during steady-state conditions. In some cases, the BAT-associated emission level can be achieved with primary measures only.

Applicability of BAT I

In existing plants, circumstances like available space, given off-gas duct system, etc. need to be taken into consideration for assessing the applicability.

90. BAT for on-site slag processing is to reduce dust emissions by using one or a combination of the following techniques:

I. efficient extraction of the slag crusher and screening devices with subsequent off-gas cleaning, if relevant

II. transport of untreated slag by shovel loaders

III. extraction or wetting of conveyor transfer points for broken material

IV. wetting of slag storage heaps

V. use of water fogs when broken slag is loaded.

In the case of using BAT I, the BAT-associated emission level for dust is < 10 – 20 mg/Nm^3, determined as the average over the sampling period (discontinuous measurement, spot samples for at least half an hour).

Water and waste water

91. BAT is to minimise the water consumption from the electric arc furnace (EAF) process by the use of closed loop water cooling systems for the cooling of furnace devices as much as possible unless once-through cooling systems are used.

92. BAT is to minimise the waste water discharge from continuous casting by using the following techniques in combination:

I. the removal of solids by flocculation, sedimentation and/or filtration

II. the removal of oil in skimming tanks or in any other effective device

III. the recirculation of cooling water and water from vacuum generation as much as possible.

The BAT-associated emission levels, for waste water from continuous casting machines, based on a qualified random sample or a 24-hour composite sample, are:

— suspended solids < 20 mg/l

— iron < 5 mg/l

— zinc < 2 mg/l

— nickel < 0,5 mg/l

— total chromium < 0,5 mg/l

— total hydrocarbons < 5 mg/l

Production residues

93. BAT is to prevent waste generation by using one or a combination of the following techniques:

I. appropriate collection and storage to facilitate a specific treatment

II. recovery and on-site recycling of refractory materials from the different processes and use internally, i.e. for the substitution of dolomite, magnesite and lime

III. use of filter dusts for the external recovery of non-ferrous metals such as zinc in the non-ferrous metals industry, if necessary, after the enrichment of filter dusts by recirculation to the electric arc furnace (EAF)

IV. separation of scale from continuous casting in the water treatment process and recovery with subsequent recycling, e.g. in the sinter/blast furnace or cement industry

V. external use of refractory materials and slag from the electric arc furnace (EAF) process as a secondary raw material where market conditions allow for it.

BAT is to manage in a controlled manner EAF process residues which can neither be avoided nor recycled.

Applicability

The external use or recycling of production residues as mentioned under BAT III – V depend on the cooperation and agreement of a third party which may not be within the control of the operator, and therefore may not be within the scope of the permit.

Energy

94. BAT is to reduce energy consumption by using continuous near net shape strip casting, if the quality and the product mix of the produced steel grades justify it.

Description

Near net shape strip casting means the continuous casting of steel to strips with thicknesses of less than 15 mm. The casting process is combined with the direct hot rolling, cooling and coiling of the strips without an intermediate reheating furnace used for conventional casting techniques, e.g. continuous casting of slabs or thin slabs. Therefore, strip casting represents a technique for producing flat steel strips of different widths and thicknesses of less than 2 mm.

Applicability

The applicability depends on the produced steel grades (e.g. heavy plates cannot be produced with this process) and on the product portfolio (product mix) of the individual steel plant. In existing plants, the applicability may be constrained by the layout and the available space as e.g. retrofitting with a strip caster requires approximately 100 m in length.

Noise

95. BAT is to reduce noise emissions from electric arc furnace (EAF) installations and processes generating high sound energies by using a combination of the following constructional and operational techniques depending on and according to local conditions (in addition to using the techniques listed in BAT 18):

I. construct the electric arc furnace (EAF) building in such a way as to absorb noise from mechanical shocks resulting from the operation of the furnace

II. construct and install cranes destined to transport the charging baskets to prevent mechanical shocks

III. special use of acoustical insulation of the inside walls and roofs to prevent the airborne noise of the electric arc furnace (EAF) building

IV. separation of the furnace and the outside wall to reduce the structure-borne noise from the electric arc furnace (EAF) building

V. housing of processes generating high sound energies (i.e. electric arc furnace (EAF) and decarburisation units) within the main building.

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EN

DECISIONS

COMMISSION IMPLEMENTING DECISION

of 11 February 2013

establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the tanning of hides and skins

(notified under document C(2013) 618)

(Text with EEA relevance)

(2013/84/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [1], and in particular Article 13(5) thereof,

Whereas:

(1) Article 13(1) of Directive 2010/75/EU requires the Commission to organise an exchange of information on industrial emissions between it and Member States, the industries concerned and non-governmental organisations promoting environmental protection in order to facilitate the drawing up of best available techniques (BAT) reference documents as defined in Article 3(11) of that Directive.

(2) In accordance with Article 13(2) of Directive 2010/75/EU, the exchange of information is to address the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste and the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein and best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b) of Article 13(2) of that Directive.

(3) 'BAT conclusions' as defined in Article 3(12) of Directive 2010/75/EU are the key element of BAT reference documents and lay down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

(4) In accordance with Article 14(3) of Directive 2010/75/EU, BAT conclusions are to be the reference for setting permit conditions for installations covered by Chapter II of that Directive.

(5) Article 15(3) of Directive 2010/75/EU requires the competent authority to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) of Directive 2010/75/EU.

(6) Article 15(4) of Directive 2010/75/EU provides for derogations from the requirement laid down in Article 15(3) only where the costs associated with the achievement of the emission levels associated with the BAT disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned.

(7) Article 16(1) of Directive 2010/75/EU provides that the monitoring requirements in the permit referred to in point (c) of Article 14(1) of the Directive are to be based on the conclusions on monitoring as described in the BAT conclusions.

(8) In accordance with Article 21(3) of Directive 2010/75/EU, within four years of publication of decisions on BAT conclusions, the competent authority is to reconsider and, if necessary, update all the permit conditions and ensure that the installation complies with those permit conditions.

[1] OJ L 334, 17.12.2010, p. 17.

(9) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of Directive 2010/75/EU on industrial emissions [1] established a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

(10) In accordance with Article 13(4) of Directive 2010/75/EU, the Commission obtained the opinion [2] of that forum on the proposed content of the BAT reference document for the tanning of hides and skins on 13 September 2012 and made it publicly available.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The BAT conclusions for the tanning of hides and skins are set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 11 February 2013.

For the Commission
Janez POTOČNIK
Member of the Commission

[1] OJ C 146, 17.5.2011, p. 3.
[2] http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/opinions_article

ANNEX

BAT CONCLUSIONS FOR THE TANNING OF HIDES AND SKINS

SCOPE

These BAT conclusions concern the following activities specified in Annex I to Directive 2010/75/EU, namely:

— 6.3 *Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day,*

— 6.11 *Independently operated treatment of waste water not covered by Council Directive 91/271/EEC* [1] *and discharged by an installation* undertaking activities covered under 6.3 above.

Unless stated otherwise the BAT conclusions presented can be applied to all installations subject to these BAT conclusions.

Other reference documents which are relevant for the activities covered by these BAT conclusions are the following:

Reference document	Subject
Energy Efficiency (ENE)	General energy efficiency
Economics and Cross-Media Effects (ECM)	Economics and cross-media effects of techniques
General Principles of Monitoring (MON)	Emissions and consumption monitoring
Emissions from storage (EFS)	Emissions from tanks, pipework and stored chemicals
Waste Incineration (WI)	Waste incineration
Waste Treatments Industries (WT)	Waste treatment

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

DEFINITIONS

For the purposes of these BAT conclusions, the following definitions apply:

Beamhouse/Limeyard	That portion of the tannery where the hides are soaked, limed, fleshed, and unhaired, when necessary, prior to the tanning process.
By-product	Object or substance meeting the requirements of Article 5 of Directive 2008/98/EC of the European Parliament and of the Council [1].
Existing plant	A plant that is not a new plant.
Existing processing vessel	A processing vessel that is not a new processing vessel.
New plant	A plant first operated at the installation following the publication of these BAT conclusions or a complete replacement of a plant on the existing foundations of the installation following the publication of these BAT conclusions.
New processing vessel	A processing vessel first operated at the plant following the publication of these BAT conclusions or a complete rebuild of a processing vessel following the publication of these BAT conclusions.
Tannery	An installation that carries out the activity 'Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day' (Activity 6.3 of Annex I to Directive 2010/75/EU).
Tanyard	The part of the tannery where the processes of pickling and tanning are carried out.
Urban waste water treatment plant	A plant subject to Directive 91/271/EEC.

[1] OJ L 312, 22.11.2008, p. 3.

[1] OJ L 135, 30.5.1991, p. 40.

1.1. *General BAT conclusions for the tanning of hides and skins*

1.1.1. Environmental management systems

1. In order to improve the overall environmental performance of a tannery, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

(i) commitment of the management, including senior management;

(ii) definition of an environmental policy that includes the continuous improvement of the installation by the management;

(iii) planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;

(iv) implementation of procedures paying particular attention to:

(a) structure and responsibility;

(b) training, awareness and competence;

(c) communication;

(d) employee involvement;

(e) documentation;

(f) efficient process control;

(g) maintenance programmes;

(h) emergency preparedness and response;

(i) safeguarding compliance with environmental legislation;

(v) checking performance and taking corrective action, paying particular attention to:

(a) monitoring and measurement (see also the reference document on the general principles of monitoring);

(b) corrective and preventive action;

(c) maintenance of records;

(d) independent (where practicable) internal and external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

(vi) review of the EMS and its continuing suitability, adequacy and effectiveness by senior management;

(vii) following the development of cleaner technologies;

(viii) consideration for the environmental impacts from the eventual decommissioning of the installation at the stage of designing a new plant, and throughout its operating life;

(ix) application of sectoral benchmarking on a regular basis.

Specifically for the tanning of hides and skins, it is also important to consider the following potential features of the EMS:

(x) to facilitate decommissioning, the maintenance of records of the locations on the site where particular process steps are carried out;

(xi) other items listed under BAT conclusion 2.

Applicability

The scope (e.g. level of details) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2. Good housekeeping

2. In order to minimise the environmental impact of the production process, BAT is to apply the principles of good housekeeping by applying the following techniques in combination:

(i) careful selection and control of substances and raw materials (e.g. quality of hides, quality of chemicals);

(ii) input-output analysis with a chemical inventory, including quantities and toxicological properties;

(iii) minimisation of the use of chemicals to the minimum level required by the quality specifications of the final product;

(iv) careful handling and storage of raw materials and finished products in order to reduce spills, accidents and water wastage;

(v) segregation of waste streams, where practicable, in order to allow for the recycling of certain waste streams;

(vi) monitoring of critical process parameters to ensure stability of the production process;

(vii) regular maintenance of the systems for the treatment of effluents;

(viii) review of options for the reuse of process/washing water;

(ix) review of waste disposal options.

1.2. *Monitoring*

3. BAT is to monitor emissions and other relevant process parameters, including those indicated below, with the given associated frequency and to monitor emissions according to EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

	Parameter	Frequency	Applicability
a	**Measurement of water consumption in the two process stages: up to tanning and post-tanning, and recording of production in the same period.**	At least monthly.	Applicable to plants carrying out wet processing.
b	**Recording of the quantities of process chemicals used in each process step and recording of production in the same period.**	At least yearly.	Generally applicable.
c	**Monitoring of the sulphide concentration and total chromium concentration in the final effluent after treatment for direct discharge to receiving water, by using flow proportional 24-hour composite samples.** **Monitoring of the sulphide concentration and total chromium concentration after chromium precipitation for indirect discharge, by using flow proportional 24-hour composite samples.**	On a weekly or monthly basis.	The monitoring of chromium concentration is applicable to on-site or off-site plants which undertake chromium precipitation. Where economically viable, the monitoring of sulphide concentration is applicable to plants carrying out some part of effluent treatment on site or off site for treating waste waters from tanneries.
d	**Monitoring of chemical oxygen demand (COD), biochemical oxygen demand (BOD) and ammoniacal nitrogen after on-site or off-site effluent treatment for direct discharges to receiving water, by using flow-proportional 24-hour composite samples.** **Monitoring of total suspended solids after on-site or off-site effluent treatment for direct discharges to receiving water.**	On a weekly or monthly basis. More frequent measurements in case process changes are needed.	Applicable to plants carrying out some part of effluent treatment on-site or off-site for treating waste waters from tanneries.

	Parameter	Frequency	Applicability
e	**Monitoring of halogenated organic compounds after on-site or off-site effluent treatment for direct discharges to receiving water.**	On a regular basis.	Applicable to plants where halogenated organic compounds are used in the production process and are susceptible to being released into receiving water.
f	**Measurement of pH or redox potential at the liquid outlet of wet scrubbers.**	Continuously.	Applicable to plants using wet scrubbing to abate hydrogen sulphide or ammonia emissions to the air.
g	**The keeping of a solvent inventory on an annual basis, and recording of production in the same period.**	On an annual basis.	Applicable to plants carrying out finishing using solvents and using water-borne coatings or similar materials to limit the solvent input.
h	**Monitoring of volatile organic compound emissions at the outlet of abatement equipment, and recording of production.**	Continuously or periodically.	Applicable to plants carrying out finishing using solvents and employing abatement.
i	**Indicative monitoring of the pressure drop across bag filters.**	On a regular basis.	Applicable to plants using bag filters to abate particulate matter emissions, where there is a direct discharge to the atmosphere.
j	**Testing of the capture efficiency of wet scrubbing systems.**	Annually.	Applicable to plants using wet scrubbing to abate particulate matter emissions, where there is a direct discharge to the atmosphere.
k	**Recording of the quantities of process residues sent for recovery, reuse, recycling, and disposal.**	On a regular basis.	Generally applicable.
l	**Recording of all forms of energy use and of production in the same period.**	On a regular basis.	Generally applicable.

1.3. *Minimising water consumption*

4. In order to minimise water consumption, BAT is to use one or both of the techniques given below.

	Technique	Description	Applicability
a	**The optimisation of water use in all wet process steps, including the use of batch washing instead of running water washes**	Optimisation of water use is achieved by determining the optimum quantity required for each process step and introducing the correct quantity using measuring equipment. Batch washing involves washing of hides and skins during processing by introducing the required quantity of clean water into the processing vessel and using the action of the vessel to achieve the required agitation, as opposed to running water washes which use the inflow and outflow of large quantities of water.	Applies to all plants carrying out wet processing.
b	**The use of short floats**	Short floats are reduced amounts of process water in proportion to the amount of hides or skins being processed as compared to traditional practices. There is a lower limit to this reduction because the water also functions as a lubricant and coolant for the hides or skins during processing. The rotation of process vessels containing a limited amount of water requires more robust geared drives because the mass being rotated is uneven.	This technique cannot be applied in the dyeing process step and for the processing of calfskins. Applicability is also limited to: — new processing vessels, — existing processing vessels that allow the use of, or can be modified to use, short floats.

The review of options for the reuse of process/washing water is part of an Environmental Management System (see BAT 1) and of the principles of good housekeeping (see BAT 2).

The BAT-associated consumption levels for water

See Table 1 (for bovine hides) and Table 2 (for sheepskins).

Table 1

BAT-associated consumption levels for water for the processing of bovine hides

Process stages	Water consumption per tonne of raw hide [1] (m^3/t)	
	Unsalted hides	Salted hides
Raw to wet blue/white	10 to 15	13 to 18
Post-tanning processes and finishing	6 to 10	6 to 10
Total consumption.	16 to 25	19 to 28

[1] Monthly average values. Processing of calfskins and vegetable tanning may require a higher water

Table 2

BAT-associated consumption levels for water for the processing of sheepskins

Process stages	Specific water consumption [1]
	litres per skin
Raw to pickle	65 to 80
Pickle to wet blue	30 to 55
Post-tanning processes and finishing	15 to 45
Total	110 to 180

[1] Monthly average values. Wool-on sheepskins may require a higher water consumption.

1.4. *Reduction of emissions in waste water*

1.4.1. Reduction of emissions in waste water from beamhouse process steps

5. In order to reduce the pollutant load in the waste water before effluent treatment arising from the beamhouse process steps, BAT is to use an appropriate combination of the techniques given below.

	Technique	Description	Applicability
a	**The use of short floats**	Short floats are reduced amounts of process water. When less water is present, the quantity of process chemicals which are discarded unreacted, is reduced.	The technique cannot be applied for the processing of calfskins. Applicability is also limited to: — new processing vessels, — existing processing vessels that allow the use of, or can be modified to use, short floats.

	Technique	Description	Applicability
b	**The use of clean hides or skins**	Use of hides or skins which have less manure adhering to the exterior, possibly through a formal 'clean hides scheme'.	Applicable subject to the constraints of the availability of clean hides.
c	**Processing fresh hides or skins**	Unsalted hides or skins are used. Rapid post-mortem cooling combined with either short delivery times or temperature-controlled transport and storage are used to prevent their deterioration.	Applicability is limited by the availability of fresh hides or skins. Cannot be applied when a supply chain longer than two days is involved.
d	**Shaking off loose salt from hides by mechanical means**	Salted hides are opened out for processing in a manner which shakes or tumbles them, so that loose salt crystals fall off and are not taken into the soaking process.	Applicability is limited to tanneries processing salted hides.
e	**Hair-save unhairing**	Unhairing is carried out by dissolving the hair root rather than the whole hair. The remaining hair is filtered out of the effluent. The concentration of hair breakdown products in the effluent is reduced.	The technique is not applicable where facilities for the processing of hair for use are not available within a reasonable transport distance or when the hair use is not possible. Applicability is also limited to: — new processing vessels, — existing processing vessels that allow the use of, or can be modified to use, the technique.
f	**Using organic sulphur compounds or enzymes in the unhairing of bovine hides**	The amount of inorganic sulphide used in unhairing is reduced by partially replacing it by organic sulphur compounds or by additional use of appropriate enzymes.	Additional use of enzymes is not applicable to tanneries producing leather with a visible grain (e.g. aniline leather).
g	**Reduced ammonium use during deliming**	The use of ammonium compounds in deliming is partially or completely replaced by the injection of carbon dioxide gas and/or the use of other substitute deliming agents.	The complete replacement of ammonium compounds by CO_2 during deliming cannot be applied to the processing of materials whose thickness is over 1,5 mm. The applicability of partial or complete replacement of ammonium compounds by CO_2 during deliming is also limited to: — new processing vessels, — existing processing vessels that allow the use of, or can be modified to use, CO_2 during deliming.

1.4.2. Reduction of emissions in waste water from tanyard process steps

6. In order to reduce the pollutant load in the waste water before effluent treatment arising from the tanyard process steps, BAT is to use an appropriate combination of the techniques given below.

	Technique	Description	Applicability
a	**The use of short floats**	Short floats are reduced amounts of process water. When less water is present, the quantity of process chemicals which is discarded unreacted is reduced.	This technique cannot be applied for the processing of calfskins. Applicability is also limited to: — new processing vessels, — existing processing vessels that allow the use of, or can be modified to use, short floats.
b	**Maximising the uptake of chromium tanning agents**	Optimisation of the operating parameters (e.g. pH, float, temperature, time, and drum speed) and the use of chemicals to increase the proportion of the chromium-tanning agent taken up by the hides or skins.	Generally applicable.
c	**Optimised vegetable-tanning methods**	Use of drum tanning for part of the process. Use of pretanning agents to aid penetration of vegetable tannins.	Cannot be applied in the production of vegetable-tanned sole leather.

1.4.3. Reduction of emissions in waste water from post-tanning process steps

7. In order to reduce the pollutant load in the waste water before effluent treatment arising from the post-tanning process steps, BAT is to use an appropriate combination of the techniques given below.

	Technique	Description	Applicability
a	**The use of short floats**	Short floats are reduced amounts of process water. When less water is present, the quantity of process chemicals which is discarded unreacted is reduced.	This technique cannot be applied in the dyeing process step and for the processing of calfskins. Applicability is also limited to: — new processing vessels, — existing processing vessels that allow the use of, or can be modified to use, short floats.
b	**Optimisation of retanning, dyeing, and fatliquoring**	Optimisation of process parameters to ensure the maximum uptake of process chemicals.	Generally applicable.

1.4.4. Other reductions of emissions in waste water

8. In order to prevent the emission of specific pesticides in waste water, BAT is to only process hides or skins which have not been treated with those materials.

Description

The technique consists in the specification in supply contracts of materials free from pesticides that are:

— listed in Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy [1],

— listed in Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants [2],

— classified as carcinogen, mutagen or reprotoxic according to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures [3].

Examples include DDT, cyclodiene pesticides (aldrin, dieldrin, endrin, isodrin), and HCH including lindane.

Applicability

Generally applicable to tanneries within the constraints of controlling the specifications given to non-EU hides and skins suppliers.

9. In order to minimise the emissions of biocides in waste water, BAT is to process hides or skins only with biocidal products approved in accordance with the dispositions given by Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products [4].

1.5. *Treatment of emissions to water*

10. In order to reduce emissions to receiving waters, BAT is to apply waste water treatment comprising an appropriate on-site and/or off-site combination of the following techniques:

(i) mechanical treatment;

(ii) physico-chemical treatment;

(iii) biological treatment;

(iv) biological nitrogen elimination.

Description

The application of an appropriate combination of the techniques described below. The combination of techniques can be implemented on site and/or off site, in two or three stages.

Technique		Description	Applicability
a	**Mechanical treatment**	Screening of gross solids, skimming of fats, oils, and greases and removal of solids by sedimentation.	Generally applicable for on-site and/or off-site treatment.
b	**Physico-chemical treatment**	Sulphide oxidation and/or precipitation, COD and suspended solids removal by, e.g., coagulation and flocculation. Chromium precipitation by increasing pH to 8 or above using an alkali (e.g. calcium hydroxide, magnesium oxide, sodium carbonate, sodium hydroxide, sodium aluminate).	Generally applicable for on-site and/or off-site treatment.
c	**Biological treatment**	Aerobic biological waste water treatment using aeration, including the removal of suspended solids by, e.g., sedimentation, secondary flotation.	Generally applicable for on-site and/or off-site treatment.
d	**Biological nitrogen elimination**	Nitrification of ammoniacal nitrogen compounds to nitrates, followed by the reduction of nitrates to gaseous nitrogen.	Applicable to plants with direct discharge to receiving water. Difficult implementation into existing plants where there are space limitations.

[1] OJ L 348, 24.12.2008, p. 84.
[2] OJ L 158, 30.4.2004, p. 7.
[3] OJ L 353, 31.12.2008, p. 1.
[4] OJ L 167, 27.6.2012, p. 1.

BAT-associated emission levels

See Table 3. BAT-AELs apply for:

(i) direct waste water discharges from tanneries on-site waste water treatment plants;

(ii) direct waste water discharges from independently operated waste water treatment plants covered under Section 6.11 in Annex I to Directive 2010/75/EU treating waste water mostly from tanneries.

Table 3

BAT-AELs for direct discharges of waste water after treatment

Parameter	BAT-AELs
	mg/l (monthly average values based on the average of the 24-hour representative composite samples taken over a month)
COD	200-500 ([1])
BOD_5	15-25
Suspended solids	< 35
Ammoniacal nitrogen NH_4-N (as N)	< 10
Total chromium (as Cr)	< 0,3-1
Sulphide (as S)	< 1

([1]) The upper level is associated with COD inlet concentrations of ≥ 8 000 mg/l.

11. In order to reduce the chromium content of waste water discharges, BAT is to apply on-site or off-site chromium precipitation.

Description

See BAT 10, technique b.

The efficiency of chromium precipitation is higher in the case of segregated, concentrated chromium-bearing streams.

Applicability

Generally applicable for on-site and/or off-site treatment of waste water effluents of tanneries carrying out chromium tanning and/or retanning.

BAT-associated emission levels

See Table 3 for chromium BAT-AELs for direct discharges to receiving water, and Table 4 for chromium BAT-AELs for indirect discharges into urban waste water treatment plants.

12. In order to reduce total chromium and sulphide emissions through indirect discharges of waste water from tanneries into urban waste water treatment plants, BAT is to apply chromium precipitation and sulphide oxidation.

Description

See BAT 10, technique b.

The removal efficiency is higher in the case of segregated, concentrated chromium/sulphide-bearing streams.

Sulphide oxidation consists of a catalytic oxidation (aeration in the presence of manganese salts).

Applicability

Chromium precipitation is generally applicable for on-site and/or off-site treatment of waste water effluents of tanneries carrying out chromium tanning and/or retanning.

BAT-associated emissions levels

See Table 4 for chromium and sulphide BAT-AELs for indirect discharges into urban waste water treatment plants.

Table 4

BAT-AELs for total chromium and sulphide emissions through indirect discharges of waste water from tanneries into urban waste water treatment plants

Parameter	BAT-AELs
	mg/l (monthly average values based on the average of the 24-hour representative composite samples taken over a month)
Total chromium (as Cr)	< 0,3-1
Sulphide (as S)	< 1

1.6. *Airborne emissions*

1.6.1. Odour

13. In order to reduce the generation of ammonia odours from processing, BAT is to partially or completely replace ammonium compounds in deliming.

Applicability

The complete replacement of ammonium compounds by CO_2 during deliming cannot be applied to the processing of materials whose thickness is over 1,5 mm.

The applicability of partial or complete replacement of ammonium compounds by CO_2 during deliming is also limited to both new and existing processing vessels that allow the use of, or can be modified to use, CO_2 during deliming.

14. In order to reduce the emission of odours from process steps and effluent treatment, BAT is to abate ammonia and hydrogen sulphide by the scrubbing and/or biofiltration of extracted air in which odour of these gases are noticeable.

15. In order to prevent the production of odours from the decomposition of raw hides or skins, BAT is to use curing and storage designed to prevent decomposition, and rigorous stock rotation.

Description

Correct salt curing or temperature control, both combined with rigorous stock rotation to eliminate decomposition odours.

16. In order to reduce the emission of odours from waste, BAT is to use handling and storage procedures designed to reduce waste decomposition.

Description

Control of waste storage and methodical removal of putrescible waste from the installation before its decomposition causes odour problems.

Applicability

Applies only to plants which produce putrescible wastes.

17. In order to reduce the emission of odours from the beamhouse effluent, BAT is to use pH control followed by treatments to remove the sulphide content.

Description

Maintaining the pH of effluents containing sulphide from the beamhouse above 9,5 until the sulphide has been treated (on or off site) by one of the following techniques:

(i) catalytic oxidation (using manganese salts as a catalyst);

(ii) biological oxidation;

(iii) precipitation; or

(iv) by mixing in an enclosed vessel system fitted with an exhaust scrubber or a carbon filter.

Applicability

Applies only to plants carrying out sulphide unhairing.

1.6.2. Volatile organic compounds

18. In order to reduce the airborne emissions of halogenated volatile organic compounds, BAT is to replace halogenated volatile organic compounds used in the process with substances that are not halogenated.

Description

Replacement of halogenated solvents by non-halogenated solvents.

Applicability

Does not apply to the dry degreasing of sheepskins carried out in closed cycle machines.

19. In order to reduce airborne emissions of volatile organic compounds (VOC) from finishing, BAT is to use one or a combination of the techniques given below, priority being given to the first one.

Technique		Description
a	**The use of water-borne coatings in combination with an efficient application system**	Limiting emissions of volatile organic compounds by the use of water-borne coatings, with each coat applied by one of the following: curtain coating or roller coating or improved spraying techniques.
b	**The use of extraction ventilation and an abatement system**	Treating the exhaust air by the use of an extraction system fitted with one or more of the following: wet scrubbing, adsorption, bio-filtration or incineration.

BAT-associated solvent use levels and BAT-associated emission levels for VOC

Both the solvent use rates associated with the use of water-borne coatings in combination with an efficient application system and the BAT-AEL range for specific VOC emissions where an extraction ventilation and abatement system is used as an alternative to the use of water-borne finishing materials are given in Table 5.

Table 5

BAT-associated solvent use levels and BAT-AELs for VOC emissions

Parameter	Type of production		BAT-associated levels
			g/m^2 (annual average values per unit of finished leather)
Solvent use levels	Where water-borne coatings are used in combination with an efficient application system	Upholstery and automotive leather	10-25
		Footwear, garment, and leathergoods leathers	40-85
		Coated leathers (coating thickness > 0,15 mm)	115-150

Parameter	Type of production	BAT-associated levels
		g/m^2 (annual average values per unit of finished leather)
VOC emissions	Where an extraction ventilation and abatement system is used as an alternative to the use of water-borne finishing materials	9-23 ([1])

([1]) BAT-AEL range expressed as total carbon.

1.6.3. Particulate matter

20. In order to reduce the airborne particulate matter emissions from the dry finishing stages of production, BAT is to use an extraction ventilation system fitted with bag filters or wet scrubbers.

BAT-associated emission levels

The BAT-AEL for particulate matter is 3 to 6 mg per normal m^3 of exhausted air expressed as a 30-minute mean.

1.7. *Waste management*

21. In order to limit the quantities of wastes sent for disposal, BAT is to organise operations on the site so as to maximise the proportion of process residues, which arise as by-products, including the following:

Process residue	Uses as a by-product
Hair and wool	— Filling material — Wool textiles
Limed trimmings	— Collagen production
Untanned splits	— Processed to leather — Production of sausage casings — Collagen production — Dog chews
Tanned splits and trimmings	— Finished for use in patchwork, small leather goods, etc. — Collagen production

22. In order to limit the quantities of wastes sent for disposal, BAT is to organise operations on the site so as to facilitate waste reuse, or failing that, waste recycling, or failing that, 'other recovery', including the following:

Waste	Reuse after preparation	Recycling as	Other recovery
Hair and Wool	— Manufacture of protein hydrolysate	— Fertiliser	— Energy recovery
Raw trimmings		— Hide glue	— Energy recovery
Limed trimmings	— Tallow — Manufacture of technical gelatine	— Hide glue	
Fleshings	— Manufacture of protein hydrolysate — Tallow	— Hide glue	— Production of substitute fuel — Energy recovery

Waste	Reuse after preparation	Recycling as	Other recovery
Untanned splits	— Manufacture of technical gelatine — Manufacture of protein hydrolysate	— Hide glue	— Energy recovery
Tanned splits and trimmings	— Leather fibreboard production from non-finished trimmings — Manufacture of protein hydrolysate		— Energy recovery
Tanned shavings	— Leather fibreboard production — Manufacture of protein hydrolysate		— Energy recovery
Sludges from waste water treatment			— Energy recovery

23. In order to reduce the chemical consumption and reduce the amount of leather waste containing chromium-tanning agents sent for disposal, BAT is to use lime splitting.

Description

Carrying out the splitting operation at an earlier stage of processing, so as to produce an untanned by-product.

Applicability

Applies only to plants using chromium tanning.

Not applicable:

— when hides or skins are being processed for full substance (i.e. unsplit) products,

— when a firmer leather has to be produced (e.g. shoe leather),

— when a more uniform thickness is needed in the final product,

— where tanned splits are produced as a product or co-product.

24. In order to reduce the amount of chromium in sludge sent for disposal, BAT is to use one or a combination of the techniques given below.

	Technique	Description	Applicability
a	**Recovery of chromium for reuse in the tannery**	Re-solution of the chromium precipitated from the tanning float, using sulphuric acid for use as a partial substitute for fresh chromium salts.	Applicability is restricted by the need to produce leather properties which meet customers specification, in particular related to dyeing (reduced fastness and less brightness of colours) and fogging.
b	**Recovery of chromium for reuse in another industry**	Use of the chromium sludge as a raw material by another industry.	Applies only where an industrial user for the recovered waste can be found.

25. In order to reduce energy, chemical and handling capacity requirements of sludge for its subsequent treatment, BAT is to reduce the water content of sludges by using sludge dewatering.

Applicability

Applies to all plants carrying out wet processing.

1.8. *Energy*

26. In order to reduce energy consumed in drying, BAT is to optimise the preparation for drying by samming or any other mechanical dewatering.

27. In order to reduce energy consumption for wet processes, BAT is to use short floats.

Description

Reducing the energy used to heat water by reducing hot water use.

Applicability

The technique cannot be applied in the dyeing process step and for the processing of calfskins.

Applicability is also limited to:

— new processing vessels,

— existing processing vessels that allow the use of, or can be modified to use, short floats.

BAT-associated energy consumption rates

See Table 6.

Table 6

Specific energy consumption associated with BAT

Activity stages	Specific energy consumption per unit of raw material [1]
	GJ/t
Processing bovine hides from raw to wet blue or wet white	< 3
Processing bovine hides from raw to finished leather	< 14
Processing sheepskins from raw to finished leather	< 6

[1] The energy consumption values (expressed as an annual average not corrected to primary energy) cover the energy use in the production process including electricity and the total heating for indoor spaces, but excluding the energy use for waste water treatment.

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[1] Text with EEA relevance

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

II

(Non-legislative acts)

DECISIONS

COMMISSION IMPLEMENTING DECISION

of 26 March 2013

establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the production of cement, lime and magnesium oxide

(notified under document C(2013) 1728)

(Text with EEA relevance)

(2013/163/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) ([1]), and in particular Article 13(5) thereof,

Whereas:

(1) Article 13(1) of Directive 2010/75/EU requires the Commission to organise an exchange of information on industrial emissions between it and Member States, the industries concerned and non-governmental organisations promoting environmental protection in order to facilitate the drawing up of best available techniques (BAT) reference documents as defined in Article 3(11) of that Directive.

(2) In accordance with Article 13(2) of Directive 2010/75/EU, the exchange of information is to address the performance of installations and techniques in terms of emissions, expressed as short- and long-term averages, where appropriate, and the associated reference conditions, consumption and nature of raw materials, water consumption, use of energy and generation of waste and the techniques used, associated monitoring, cross-media effects, economic and technical viability and developments therein and best available techniques and emerging techniques identified after considering the issues mentioned in points (a) and (b) of Article 13(2) of that Directive.

(3) 'BAT conclusions' as defined in Article 3(12) of Directive 2010/75/EU are the key element of BAT reference documents and lay down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

(4) In accordance with Article 14(3) of Directive 2010/75/EU, BAT conclusions are to be the reference for setting permit conditions for installations covered by Chapter II of that Directive.

(5) Article 15(3) of Directive 2010/75/EU requires the competent authority to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions referred to in Article 13(5) of Directive 2010/75/EU.

(6) Article 15(4) of Directive 2010/75/EU provides for derogations from the requirement laid down in Article 15(3) only where the costs associated with the achievement of the emission levels associated with the BAT disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned.

(7) Article 16(1) of Directive 2010/75/EU provides that the monitoring requirements in the permit referred to in point (c) of Article 14(1) of the Directive are to be based on the conclusions on monitoring as described in the BAT conclusions.

(8) In accordance with Article 21(3) of Directive 2010/75/EU, within 4 years of publication of decisions on BAT conclusions, the competent authority is to reconsider and, if necessary, update all the permit conditions and ensure that the installation complies with those permit conditions.

([1]) OJ L 334, 17.12.2010, p. 17.

(9) Commission Decision of 16 May 2011 establishing a forum for the exchange of information pursuant to Article 13 of Directive 2010/75/EU on industrial emissions [1] established a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection.

(10) In accordance with Article 13(4) of Directive 2010/75/EU, the Commission obtained the opinion [2] of that forum on the proposed content of the BAT reference document for the production of cement, lime and magnesium oxide on 13 September 2012 and made it publicly available.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 75(1) of Directive 2010/75/EU,

HAS ADOPTED THIS DECISION:

Article 1

The BAT conclusions for the production of cement, lime and magnesium oxide are set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 26 March 2013.

For the Commission
Janez POTOČNIK
Member of the Commission

[1] OJ C 146, 17.5.2011, p. 3.
[2] http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/opinions_article

ANNEX

BAT CONCLUSIONS FOR THE PRODUCTION OF CEMENT, LIME AND MAGNESIUM OXIDE

SCOPE

These BAT conclusions concern the following industrial activities specified in Section 3.1 of Annex I to Directive 2010/75/EU, namely:

'3.1. Production of cement, lime and magnesium oxide', which involve:

(a) production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other kilns with a production capacity exceeding 50 tonnes per day;

(b) production of lime in kilns with a production capacity exceeding 50 tonnes per day;

(c) production of magnesium oxide in kilns with a production capacity exceeding 50 tonnes per day.

Regarding point 3.1(c) above, these BAT conclusions only address the production of MgO using the dry process route based on mined natural magnesite (magnesium carbonate - $MgCO_3$).

In particular, concerning the above-mentioned activities, these BAT conclusions cover the following:

— production of cement, lime and magnesium oxide (dry process route)

— raw materials – storage and preparation

— fuels – storage and preparation

— use of waste as raw materials and/or fuels – quality requirements, control and preparation

— products – storage and preparation

— packaging and dispatch.

These BAT conclusions do not address the following activities:

— the production of magnesium oxide using the wet process route using magnesium chloride as the starting material, covered by the Reference Document on Best Available Techniques for Large Volume Inorganic Chemicals – Solids and Others Industry (LVIC-S)

— the production of ultra low-carbon dolime (i.e. a mixture of calcium and magnesium oxides produced by the nearly full decarbonation of dolomite ($CaCO_3.MgCO_3$). The residual CO_2 content of the product is below 0,25 % and the bulk density well below 3,05 g/cm^3)

— shaft kilns for cement clinker production

— activities which are not directly associated with the primary activity such as quarrying.

Other reference documents which are of relevance for the activities covered by these BAT conclusions are the following:

Reference documents	Activity
Emissions from Storage (EFS)	Storage and handling of raw materials and products
General Principles of Monitoring (MON)	Emissions monitoring
Waste Treatments Industries (WT)	Waste treatment
Energy Efficiency (ENE)	General energy efficiency
Economic and Cross-media Effects (ECM)	Economics and cross-media effects of techniques

The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.

Where these BAT conclusions address waste co-incineration plants, this is without prejudice to the provisions of Chapter IV of and Annex VI to Directive 2010/75/EU.

Where these BAT conclusions address energy efficiency, this is without prejudice to the provisions of the new Directive 2012/27/EU of the European Parliament and of the Council [1] on Energy Efficiency.

NOTE ON THE EXCHANGE OF INFORMATION

The exchange of information on BAT for the Cement, Lime and Magnesium Oxide sectors ended in 2008. The information available then, complemented by additional information concerning the emissions from magnesium oxide production, was used for reaching these BAT conclusions.

DEFINITIONS

For the purposes of these BAT conclusions, the following definitions apply:

Term used	Definition
New plant	A plant introduced on the site of the installation following the publication of these BAT conclusions or a complete replacement of a plant on the existing foundations of the installation following the publication of these BAT conclusions
Existing plant	A plant which is not a new plant
Major upgrade	An upgrade of the plant/kiln involving a major change in the kiln requirements or technology, or replacement of the kiln
'Use of waste as fuel and/or raw material'	The term covers the use of: — waste fuels with significant calorific value; and — waste materials without significant calorific value but with mineral components used as raw materials that contribute to the intermediate product clinker; and — waste materials that have both a significant calorific value and mineral components

Definition for certain products

Term used	Definition
White cement	Cement falling under the following PRODCOM 2007 code: 26.51.12.10 – White Portland cement
Special cement	Special cements falling under the following PRODCOM 2007 codes: — 26.51.12.50 – Aluminous cement — 26.51.12.90 – Other hydraulic cements
Dolime or calcinated dolime	A mixture of calcium and magnesium oxides produced by the decarbonation of dolomite ($CaCO_3.MgCO_3$) with a residual CO_2 content of the product exceeding 0,25 % and the bulk density of the commercial product well below 3,05 g/cm^3. The free content as MgO is usually between 25 % and 40 %.
Sintered dolime	A mixture of calcium and magnesium oxides used solely for the production of refractory bricks and other refractory products, with a minimum bulk density of 3,05 g/cm^3

[1] OJ L 315, 14.11.2012, p. 1.

Definition for certain air pollutants

Term used	Definition
NO_x expressed as NO_2	The sum of nitrogen oxide (NO) and nitrogen dioxide (NO_2) expressed as NO_2
SO_x expressed as SO_2	The sum of sulphur dioxide (SO_2) and sulphur trioxide (SO_3) expressed as SO_2
Hydrogen chloride expressed as HCl	All gaseous chlorides expressed as HCl
Hydrogen fluoride expressed as HF	All gaseous fluorides expressed as HF

Abbreviations

ASK	Annular shaft kiln
DBM	Dead burned magnesia
I-TEQ	International toxicity equivalent
LRK	Long rotary kiln
MFSK	Mixed feed shaft kiln
OK	Other kilns For the lime industry this covers: — double-inclined shaft kilns — multi-chamber shaft kilns — central burner shaft kilns — external chamber shaft kilns — beam burner shaft kilns — internal arch shaft kilns — travelling grate kilns — 'top-shaped' kilns — flash calciner kilns — rotating hearth kilns
OSK	Other shaft kiln (shaft kilns other than ASK and MFSK)
PCDD	Polychlorinated dibenzo-p-dioxin
PCDF	Polychlorinated dibenzofuran
PFRK	Parallel flow regenerative kiln
PRK	Rotary kiln with preheater

GENERAL CONSIDERATIONS

Averaging periods and reference conditions for air emissions

Emission levels associated with the best available techniques (BAT-AELs) given in these BAT conclusions refer to standard conditions: dry gas at a temperature of 273 K, and a pressure of 1 013 hPa.

Values given in concentrations apply under the following reference conditions:

Activities		Reference conditions
Kiln activities	Cement industry	10 % oxygen by volume
	Lime industry (1)	11 % oxygen by volume
	Magnesium oxide industry (dry process route) (2)	10 % oxygen by volume
Non-kiln activities	All processes	No correction for oxygen
	Lime hydrating plants	As emitted (no correction for oxygen and for dry gas)

(1) For sintered dolime produced by the 'double-pass process', the correction for oxygen does not apply.
(2) For dead burned magnesia (DBM) produced by the 'double-pass process', the correction for oxygen does not apply.

For averaging periods the following definitions apply:

Daily average value	Average value over a period of 24 hours measured by the continuous monitoring of emissions
Average over the sampling period	Average value of spot measurements (periodic) of at least 30 minutes each, unless otherwise stated

Conversion to reference oxygen concentration

The formula for calculating the emissions concentration at a reference oxygen level is shown below:

$$E_R = \frac{21 - O_R}{21 - O_M} * E_M$$

Where:

E_R (mg/Nm^3): emissions concentration related to the reference oxygen level O_R

O_R (vol %): reference oxygen level

E_M (mg/Nm^3): emissions concentration related to the measured oxygen level O_M

O_M (vol %): measured oxygen level

BAT CONCLUSIONS

1.1 **General BAT conclusions**

The BAT mentioned in this section apply to all installations covered by these BAT conclusions (cement, lime and magnesium oxide industry).

The process-specific BAT included in Sections 1.2 - 1.4 apply in addition to the general BAT mentioned in this section.

1.1.1 *Environmental management systems (EMS)*

1. In order to improve the overall environmental performance of the plants/installations producing cement, lime and magnesium oxide, production BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

i. commitment of the management, including senior management;

ii. definition of an environmental policy that includes the continuous improvement of the installation by the management;

iii. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;

iv. implementation of procedures paying particular attention to:

(a) structure and responsibility

(b) training, awareness and competence

(c) communication

(d) employee involvement

(e) documentation

(f) efficient process control

(g) maintenance programmes

(h) emergency preparedness and response

(i) safeguarding compliance with environmental legislation;

v. checking performance and taking corrective action, paying particular attention to:

(a) monitoring and measurement (see also the Reference Document on the General Principles of Monitoring)

(b) corrective and preventive action

(c) maintenance of records

(d) independent (where practicable) internal and external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

vi. review of the EMS and its continuing suitability, adequacy and effectiveness by senior management;

vii. following the development of cleaner technologies;

viii. consideration for the environmental impacts from the eventual decommissioning of the installation at the stage of designing a new plant, and throughout its operating life;

ix. application of sectoral benchmarking on a regular basis.

Applicability

The scope (e.g. level of details) and nature of the EMS (e.g. standardised or non-standardised) will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have.

1.1.2 *Noise*

2. In order to reduce/minimise noise emissions during the manufacturing processes for cement, lime and magnesium oxide, BAT is to use a combination of the following techniques:

	Technique
a	Select an appropriate location for noisy operations
b	Enclose noisy operations/units

	Technique
c	Use vibration insulation of operations/units
d	Use internal and external lining made of impact-absorbent material
e	Use soundproofed buildings to shelter any noisy operations involving material transformation equipment
f	Use noise protection walls and/or natural noise barriers
g	Use outlet silencers to exhaust stacks
h	Lag ducts and final blowers which are situated in soundproofed buildings
i	Close doors and windows of covered areas
j	Use sound insulation of machine buildings
k	Use sound insulation of wall breaks, e.g. by installation of a sluice at the entrance point of a belt conveyor
l	Install sound absorbers at air outlets, e.g. the clean gas outlet of dedusting units
m	Reduce flow rates in ducts
n	Use sound insulation of ducts
o	Apply the decoupled arrangement of noise sources and potentially resonant components, e.g. of compressors and ducts
p	Use silencers for filter fans
q	Use soundproofed modules for technical devices (e.g. compressors)
r	Use rubber shields for mills (avoiding the contact of metal against metal)
s	Construct buildings or growing trees and bushes between the protected area and the noisy activity

1.2 **BAT conclusions for the cement industry**

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all installations in the cement industry.

1.2.1 *General primary techniques*

3. In order to reduce emissions from the kiln and use energy efficiently, BAT is to achieve a smooth and stable kiln process, operating close to the process parameter set points by using the following techniques:

	Technique
a	Process control optimisation, including computer-based automatic control
b	Using modern, gravimetric solid fuel feed systems

4. In order to prevent and/or reduce emissions, BAT is to carry out a careful selection and control of all substances entering the kiln.

Description

Careful selection and control of substances entering the kiln can reduce emissions. The chemical composition of the substances and the way they are fed in the kiln are factors that should be taken into account during the selection. Substances of concern may include the substances mentioned in BAT 11 and in BAT 24 to 28.

1.2.2 *Monitoring*

5. BAT is to carry out the monitoring and measurements of process parameters and emissions on a regular basis and to monitor emissions in accordance with the relevant EN standards or, if EN standards are not available, ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality, including the following:

	Technique	Applicability
a	Continuous measurements of process parameters demonstrating the process stability, such as temperature, O_2 content, pressure and flowrate	Generally applicable
b	Monitoring and stabilising critical process parameters, i.e. homogenous raw material mix and fuel feed, regular dosage and excess oxygen	Generally applicable
c	Continuous measurements of NH_3 emissions when SNCR is applied	Generally applicable
d	Continuous measurements of dust, NO_x, SO_x, and CO emissions	Applicable to kiln processes
e	Periodic measurements of PCDD/F and metal emissions	
f	Continuous or periodic measurements of HCl, HF and TOC emissions.	
g	Continuous or periodic measurements of dust	Applicable to non-kiln activities. For small sources (< 10 000 Nm^3/h) from dusty operations other than cooling and the main milling processes, the frequency of measurements or performance checks should be based on a maintenance management system.

Description

The selection between continuous or periodic measurements mentioned in BAT 5(f) is based on the emission source and the type of pollutant expected.

1.2.3 *Energy consumption and process selection*

1.2.3.1 Process selection

6. In order to reduce energy consumption, BAT is to use a dry process kiln with multistage preheating and precalcination.

Description

In this type of kiln system, exhaust gases and recovered waste heat from the cooler can be used to preheat and precalcine the raw material feed before entering the kiln, providing significant savings in energy consumption.

Applicability

Applicable to new plants and major upgrades, subject to raw materials moisture content.

BAT-associated energy consumption levels

See Table 1.

Table 1

BAT-associated energy consumption levels for new plants and major upgrades using dry process kiln with multistage preheating and precalcination

Process	Unit	BAT-associated energy consumption levels (1)
Dry process with multistage preheating and precalcination	MJ/tonne clinker	2 900 – 3 300 (2) (3)

(1) Levels do not apply to plants producing special cement or white cement clinker that require significantly higher process temperatures due to product specifications.
(2) Under normal (excluding, e.g. start-ups and shutdowns) and optimised operational conditions.
(3) The production capacity has an influence on the energy demand, with higher capacities providing energy savings and smaller capacities requiring more energy. Energy consumption also depends on the number of cyclone preheater stages, with more cyclone preheater stages leading to lower energy consumption of the kiln process. The appropriate number of cyclone preheater stages is mainly determined by the moisture content of raw materials.

1.2.3.2 Energy consumption

7. In order to reduce/minimise thermal energy consumption, BAT is to use a combination of the following techniques:

	Technique	Applicability
a	Applying improved and optimised kiln systems and a smooth and stable kiln process, operating close to the process parameter set points by applying: I. process control optimisation, including computer-based automatic control systems II. modern, gravimetric solid fuel feed systems III. preheating and precalcination to the extent possible, considering the existing kiln system configuration	Generally applicable. For existing kilns, the applicability of preheating and precalcination is subject to the kiln system configuration
b	Recovering excess heat from kilns, especially from their cooling zone. In particular, the kiln excess heat from the cooling zone (hot air) or from the preheater can be used for drying raw materials	Generally applicable in the cement industry. Recovery of excess heat from the cooling zone is applicable when grate coolers are used. Limited recovery efficiency can be achieved on rotary coolers
c	Applying the appropriate number of cyclone stages related to the characteristics and properties of raw material and fuels used	Cyclone preheater stages are applicable to new plants and major upgrades.
d	Using fuels with characteristics which have a positive influence on the thermal energy consumption	The technique is generally applicable to the cement kilns subject to fuel availability and for existing kilns subject to the technical possibilities of injecting the fuel into the kiln
e	When replacing conventional fuels by waste fuels, using optimised and suitable cement kiln systems for burning wastes	Generally applicable to all cement kiln types
f	Minimising bypass flows	Generally applicable to the cement industry

Description

Several factors affect the energy consumption of modern kiln systems such as raw materials properties (e.g. moisture content, burnability), the use of fuels, with different properties, as well as the use of a gas bypass system. Furthermore, the production capacity of the kiln has an influence on the energy demand.

Technique 7c: the appropriate number of cyclone stages for preheating is determined by the throughput and the moisture content of raw materials and fuels which have to be dried by the remaining flue-gas heat because local raw materials vary widely regarding their moisture content or burnability

Technique 7d: conventional and waste fuels can be used in the cement industry. The characteristics of the fuels used, such as adequate calorific value and low moisture content, have a positive influence on the specific energy consumption of the kiln.

Technique 7f: the removal of hot raw material and hot gas leads to a higher specific energy consumption of about 6 – 12 MJ/tonne clinker per percentage point of removed kiln inlet gas. Hence, minimising the use of gas bypass has a positive effect on energy consumption.

8. In order to reduce primary energy consumption, BAT is to consider the reduction of the clinker content of cement and cement products.

Description

The reduction of the clinker content of cement and cement products can be achieved by adding fillers and/or additions, such as blast furnace slag, limestone, fly ash and pozzolana in the grinding step in accordance with the relevant cement standards.

Applicability

Generally applicable to the cement industry, subject to (local) availability of fillers and/or additions and local market specificities.

9. In order to reduce primary energy consumption, BAT is to consider cogeneration/combined heat and power plants.

Description

The employment of cogeneration plants for the production of steam and electricity or combined heat and power plants can be applied in the cement industry by recovering waste heat from the clinker cooler or kiln flue-gases using the conventional steam cycle processes or other techniques. Furthermore, excess heat can be recovered from the clinker cooler or kiln flue-gases for district heating or industrial applications.

Applicability

The technique is applicable in all cement kilns if sufficient excess heat is available, if appropriate process parameters can be met, and if economic viability is ensured.

10. In order to reduce/minimise electrical energy consumption, BAT is to use one or a combination of the following techniques:

	Technique
a	Using power management systems
b	Using grinding equipment and other electricity based equipment with high energy efficiency
c	Using improved monitoring systems
d	Reducing air leaks into the system
e	Process control optimisation

1.2.4 *Use of waste*

1.2.4.1 Waste quality control

11. In order to guarantee the characteristics of the wastes to be used as fuels and/or raw materials in a cement kiln and reduce emissions, BAT is to apply the following techniques:

	Technique
a	Apply quality assurance systems to guarantee the characteristics of wastes and to analyse any waste that is to be used as raw material and/or fuel in a cement kiln for: I. constant quality II. physical criteria, e.g. emissions formation, coarseness, reactivity, burnability, calorific value III. chemical criteria, e.g. chlorine, sulphur, alkali and phosphate content and relevant metals content
b	Control the amount of relevant parameters for any waste that is to be used as raw material and/or fuel in a cement kiln, such as chlorine, relevant metals (e.g. cadmium, mercury, thallium), sulphur, total halogen content
c	Apply quality assurance systems for each waste load

Description

Different types of waste materials can replace primary raw materials and/or fossil fuels in cement manufacturing and will contribute to saving natural resources.

1.2.4.2 Waste feeding into the kiln

12. In order to ensure appropriate treatment of the wastes used as fuel and/or raw materials in the kiln, BAT is to use the following techniques:

	Technique
a	Use appropriate points to feed the waste into the kiln in terms of temperature and residence time depending on kiln design and kiln operation
b	To feed waste materials containing organic components that can be volatilised before the calcining zone into the adequately high temperature zones of the kiln system
c	To operate in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion, even under the most unfavourable conditions, to a temperature of 850 °C for 2 seconds
d	To raise the temperature to 1 100 °C, if hazardous waste with a content of more than 1 % of halogenated organic substances, expressed as chlorine, are co-incinerated
e	To feed wastes continuously and constantly
f	Delay or stop co-incinerating waste for operations such as start-ups and/or shutdowns when appropriate temperatures and residence times cannot be reached, as noted in a) to d) above

1.2.4.3 Safety management for the use of hazardous waste materials

13. BAT is to apply safety management for the storage, handling and feeding of hazardous waste materials, such as using a risk-based approach according to the source and type of waste, for the labelling, checking, sampling and testing of waste to be handled.

1.2.5 *Dust emissions*

1.2.5.1 Diffuse dust emissions

14. In order to minimise/prevent diffuse dust emissions from dusty operations, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Use a simple and linear site layout of the installation	Applicable to new plants only

	Technique	Applicability
b	Enclose/encapsulate dusty operations, such as grinding, screening and mixing	Generally applicable
c	Cover conveyors and elevators, which are constructed as closed systems, if diffuse dust emissions are likely to be released from dusty material	
d	Reduce air leakages and spillage points	
e	Use automatic devices and control systems	
f	Ensure trouble-free operations	
g	Ensure proper and complete maintenance of the installation using mobile and stationary vacuum cleaning. — During maintenance operations or in cases of trouble with conveying systems, spillage of materials can take place. To prevent the formation of diffuse dust during removal operations, vacuum systems should be used. New buildings can easily be equipped with stationary vacuum cleaning piping, while existing buildings are normally better fitted with mobile systems and flexible connections — In specific cases, a circulation process could be favoured for pneumatic conveying systems	
h	Ventilate and collect dust in fabric filters: — As far as possible, all material handling should be conducted in closed systems maintained under negative pressure. The suction air for this purpose is then dedusted by a fabric filter before being emitted into the air	
i	Use closed storage with an automatic handling system: — Clinker silos and closed fully automated raw material storage areas are considered the most efficient solution to the problem of diffuse dust generated by high volume stocks. These types of storage are equipped with one or more fabric filters to prevent diffuse dust formation in loading and unloading operations — Use storage silos with adequate capacities, level indicators with cut out switches and with filters to deal with dust-bearing air displaced during filling operations	
j	Use flexible filling pipes for dispatch and loading processes, equipped with a dust extraction system for loading cement, which are positioned towards the loading floor of the lorry	

15. In order to minimise/prevent diffuse dust emissions from bulk storage areas, BAT is to use one or a combination of the following techniques:

	Technique
a	Cover bulk storage areas or stockpiles or enclose them with screening, walling or an enclosure consisting of vertical greenery (artificial or natural wind barriers for open pile wind protection)
b	Use open pile wind protection: — Outdoor storage piles of dusty materials should be avoided, but when they do exist it is possible to reduce diffuse dust by using properly designed wind barriers
c	Use water spray and chemical dust suppressors: — When the point source of diffuse dust is well localised, a water spray injection system can be installed. The humidification of dust particles aids agglomeration and so helps dust settle. A wide variety of agents is also available to improve the overall efficiency of the water spray

	Technique
d	Ensure paving, road wetting and housekeeping: — Areas used by lorries should be paved when possible and the surface should be kept as clean as possible. Wetting the roads can reduce diffuse dust emissions, especially during dry weather. They also can be cleaned with road sweepers. Good housekeeping practices should be used in order to keep diffuse dust emissions to a minimum
e	Ensure humidification of stockpiles: — Diffuse dust emissions at stockpiles can be reduced by using sufficient humidification of the charging and discharging points, and by using conveyor belts with adjustable heights
f	Match the discharge height to the varying height of the heap, automatically if possible or by reduction of the unloading velocity, when diffuse dust emissions at the charging or discharging points of storage sites cannot be avoided

1.2.5.2 Channelled dust emissions from dusty operations

This section concerns dust emissions arising from dusty operations other than those from kiln firing, cooling and the main milling processes. This covers processes such as the crushing of raw materials; raw material conveyors and elevators; the storage of raw materials, clinker and cement; the storage of fuels and the dispatch of cement.

16. In order to reduce channelled dust emissions, BAT is to apply a maintenance management system which especially addresses the performance of filters applied to dusty operations, other than those from kiln firing, cooling and main milling processes. Taking this management system into account, BAT is to use dry flue-gas cleaning with a filter.

Description

For dusty operations, dry flue-gas cleaning with a filter usually consists of a fabric filter. A description of fabric filters is provided in Section 1.5.1.

BAT-associated emission levels

The BAT-AEL for channelled dust emissions from dusty operations (other than those from kiln firing, cooling and the main milling processes) is < 10 mg/Nm^3, as the average over the sampling period (spot measurement, for at least half an hour).

It should be noted that for small sources (< 10 000 Nm^3/h) a priority approach, based on the maintenance management system, regarding the frequency for checking the performance of the filter has to be taken into account (see also BAT 5).

1.2.5.3 Dust emissions from kiln firing processes

17. In order to reduce dust emissions from flue-gases of kiln firing processes, BAT is to use dry flue-gas cleaning with a filter.

	Technique [1]	Applicability
a	Electrostatic precipitators (ESPs)	Applicable to all kiln systems
b	Fabric filters	
c	Hybrid filters	

[1] A description of the techniques is given in Section 1.5.1.

BAT-associated emission levels

The BAT-AEL for dust emissions from flue-gases of kiln firing processes is <10 – 20 mg/Nm^3, as the daily average value. When applying fabric filters or new or upgraded ESPs, the lower level is achieved.

1.2.5.4 Dust emissions from cooling and milling processes

18. In order to reduce dust emissions from the flue-gases of cooling and milling processes, BAT is to use dry flue-gas cleaning with a filter.

	Technique (1)	Applicability
a	Electrostatic precipitators (ESPs)	Generally applicable to clinker coolers and cement mills.
b	Fabric filters	Generally applicable to clinker coolers and mills
c	Hybrid filters	Applicable to clinker coolers and cement mills.

(1) A description of the techniques is given in Section 1.5.1

BAT-associated emission levels

The BAT-AEL for dust emissions from the flue-gases of cooling and milling processes is <10 – 20 mg/Nm^3, as the daily average value or average over the sampling period (spot measurements for at least half an hour). When applying fabric filters or new or upgraded ESPs, the lower level is achieved.

1.2.6 *Gaseous compounds*

1.2.6.1 NO_x emissions

19. In order to reduce the emissions of NO_x from the flue-gases of kiln firing and/or preheating/precalcining processes, BAT is to use one or a combination of the following techniques:

	Technique (1)	Applicability
a	Primary techniques	
	I. Flame cooling	Applicable to all types of kilns used for cement manufacturing. The degree of applicability can be limited by product quality requirements and potential impacts on process stability
	II. Low NO_x burners	Applicable to all rotary kilns, in the main kiln as well as in the precalciner
	III. Mid-kiln firing	Generally applicable to long rotary kilns
	IV. Addition of mineralisers to improve the burnability of the raw meal (mineralised clinker)	Generally applicable to rotary kilns subject to final product quality requirements
	V. Process optimisation	Generally applicable to all kilns
b	Staged combustion (conventional or waste fuels), also in combination with a precalciner and the use of optimised fuel mix	In general, can only be applied in kilns equipped with a precalciner. Substantial plant modifications are necessary in cyclone preheater systems without a precalciner. In kilns without precalciner, lump fuels firing might have a positive effect on NO_x reduction depending on the ability to produce a controlled reduction atmosphere and to control the related CO emissions
c	Selective non-catalytic reduction (SNCR)	In principle, applicable to rotary cement kilns. The injection zones vary with the type of kiln process. In long wet and long dry process kilns it may be difficult to obtain the right temperature and retention time needed. See also BAT 20
d	Selective catalytic reduction (SCR)	Applicability is subject to appropriate catalyst and process development in the cement industry

(1) A description of the techniques is provided in Section 1.5.2.

BAT-associated emission levels

See Table 2.

Table 2

BAT-associated emission levels for NO_x from the flue-gases of kiln firing and/or preheating/precalcining processes in the cement industry

Kiln type	Unit	BAT-AEL (daily average value)
Preheater kilns	mg/Nm^3	< 200 – 450 (1) (2)
Lepol and long rotary kilns	mg/Nm^3	400 – 800 (3)

(1) The upper level of the BAT-AEL range is 500 mg/Nm^3, if the initial NO_x level after primary techniques is > 1 000 mg/Nm^3.
(2) Existing kiln system design, fuel mix properties including waste and raw material burnability (e.g. special cement or white cement clinker) can influence the ability to be within the range. Levels below 350 mg/Nm^3 are achieved at kilns with favourable conditions when using SNCR. In 2008, the lower value of 200 mg/Nm^3 has been reported as a monthly average for three plants (easy burning mix used) using SNCR.
(3) Depending on initial levels and NH_3 slip.

20. When SNCR is used, BAT is to achieve efficient NO_x reduction, while keeping the ammonia slip as low as possible, by using the following technique:

	Technique
a	To apply an appropriate and sufficient NO_x reduction efficiency along with a stable operating process
b	To apply a good stoichiometric distribution of ammonia in order to achieve the highest efficiency of NO_x reduction and to reduce the NH_3 slip
c	To keep the emissions of NH_3 slip (due to unreacted ammonia) from the flue-gases as low as possible taking into account the correlation between the NO_x abatement efficiency and the NH_3 slip

Applicability

SNCR is generally applicable to rotary cement kilns. The injection zones vary with the type of kiln process. In long wet and long dry process kilns it may be difficult to obtain the right temperature and retention time needed. See also BAT 19.

BAT-associated emission levels

See Table 3.

Table 3

BAT-associated emission levels for NH_3 slip in the flue-gases when SNCR is applied

Parameter	Unit	BAT-AEL (daily average value)
NH_3 slip	mg/Nm^3	< 30 – 50 (1)

(1) The ammonia slip depends on the initial NO_x level and on the NO_x abatement efficiency. For Lepol and long rotary kilns, the level may be even higher.

1.2.6.2 SO_x emissions

21. In order to reduce/minimise the emissions of SO_x from the flue-gases of kiln firing and/or preheating/precalcining processes, BAT is to use one of the following techniques:

	Technique [1]	Applicability
a	Absorbent addition	Absorbent addition is, in principle, applicable to all kiln systems, although it is mostly used in suspension preheaters. Lime addition to the kiln feed reduces the quality of the granules/nodules and causes flow problems in Lepol kilns. For preheater kilns it has been found that direct injection of slaked lime into the flue-gas is less efficient than adding slaked lime to the kiln feed
b	Wet scrubber	Applicable to all cement kiln types with appropriate (sufficient) SO_2 levels for manufacturing the gypsum

[1] A description of the techniques is provided in Section 1.5.3

Description

Depending on the raw materials and the fuel quality, levels of SO_x emissions can be kept low not requiring the use of an abatement technique.

If necessary, primary techniques and/or abatement techniques such as absorbent addition or wet scrubber can be used to reduce SO_x emissions.

Wet scrubbers have already been operated in plants with initial unabated SO_x levels higher than 800 – 1 000 mg/Nm^3.

BAT-associated emission levels

See Table 4.

Table 4

BAT-associated emission levels for SO_x from the flue-gases of kiln firing and/or preheating/precalcining processes in the cement industry

Parameter	Unit	BAT-AEL [1] [2] (daily average value)
SO_x expressed as SO_2	mg/Nm^3	< 50 – 400

[1] The range takes into account the sulphur content in the raw materials.
[2] For white cement and special cement clinker production, the ability of clinker to retain fuel sulphur might be significantly lower leading to higher SO_X emissions.

22. In order to reduce SO_2 emissions from the kiln, BAT is to optimise the raw milling processes.

Description

The technique consists of optimising the raw milling process so that the raw mill can be operated to act as SO_2 abatement for the kiln. This can be achieved by adjusting factors such as:

— raw material moisture

— mill temperature

— retention time in the mill

— fineness of the ground material.

Applicability

Applicable if the dry milling process is used in compound mode.

1.2.6.3 CO emissions and CO trips

1.2.6.3.1 Reduction of CO trips

23. In order to minimise the frequency of CO trips and keep their total duration to below 30 minutes annually, when using electrostatic precipitators (ESPs) or hybrid filters, BAT is to use the following techniques in combination:

	Technique
a	Manage CO trips in order to reduce the ESP downtime
b	Continuous automatic CO measurements by means of monitoring equipment with a short response time and situated close to the CO source

Description

For safety reasons, due to the risk of explosions, ESPs will have to shut down during elevated CO levels in the flue-gases. The following techniques prevent CO trips and, therefore, reduce ESP shutdown times:

— control of the combustion process

— control of the organic load of raw materials

— control of the quality of the fuels and fuel feeding system.

Disruptions predominantly happen during the start-up operation phase. For safe operation, the gas analysers for ESP protection have to be on-line during all operational phases and the ESP downtime can be reduced by using a backup monitoring system maintained in operation.

The continuous CO monitoring system needs to be optimised for reaction time and should be located close to the CO source, e.g. at a preheater tower outlet, or at a kiln inlet in the case of a wet kiln application.

When hybrid filters are used, the grounding of the bag support cage with the cell plate is recommended.

1.2.6.4 Total organic carbon emissions (TOC)

24. In order to keep the emissions of TOC from the flue-gases of the kiln firing processes low, BAT is to avoid feeding raw materials with a high content of volatile organic compounds (VOC) into the kiln system via the raw material feeding route.

1.2.6.5 Hydrogen chloride (HCl) and hydrogen fluoride (HF) emissions

25. In order prevent/reduce the emissions of HCl from flue-gases of the kiln firing processes, BAT is to use one or a combination of the following primary techniques:

	Technique
a	Using raw materials and fuels with a low chlorine content
b	Limiting the amount of chlorine content for any waste that is to be used as raw material and/or fuel in a cement kiln

BAT-associated emission levels

The BAT-AEL for the emissions of HCl is <10 mg/Nm^3, as the daily average value or average over the sampling period (spot measurements, for at least half an hour).

26. In order to prevent/reduce the emissions of HF from the flue-gases of the kiln firing processes, BAT is to use one or a combination of the following primary techniques:

	Technique
a	Using raw materials and fuels with a low fluorine content
b	Limiting the amount of fluorine content for any waste that is to be used as raw material and/or fuel in a cement kiln

BAT-associated emission levels

The BAT-AEL for the emissions of HF is <1 mg/Nm^3, as the daily average value or average over the sampling period (spot measurements, for at least half an hour).

1.2.7 *PCDD/F emissions*

27. In order to prevent emissions of PCDD/F or to keep the emissions of PCDD/F from the flue-gases of the kiln firing processes low, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Carefully selecting and controlling of kiln inputs (raw materials), i.e. chlorine, copper and volatile organic compounds	Generally applicable
b	Carefully selecting and controlling kiln inputs (fuels), i.e. chlorine and copper	Generally applicable
c	Limiting/avoiding the use of wastes which contain chlorinated organic materials	Generally applicable
d	Avoid feeding fuels with a high content of halogens (e.g. chlorine) in secondary firing	Generally applicable
e	Quick cooling of kiln flue-gases to lower than 200 °C and minimising residence time of flue-gases and oxygen content in zones where the temperatures range between 300 and 450 °C	Applicable to long wet kilns and long dry kilns without preheating. In modern preheater and precalciner kilns, this feature is already inherent
f	Stop co-incinerating waste for operations such as start-ups and/or shutdowns	Generally applicable

BAT-associated emission levels

The BAT-AEL for the emissions of PCDD/F from the flue-gases of the kiln firing processes is <0,05 – 0,1 ng PCDD/F I-TEQ/Nm^3, as the average over the sampling period (6 – 8 hours).

1.2.8 *Metal emissions*

28. In order to minimise the emissions of metals from the flue-gases of the kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique
a	Selecting materials with a low content of relevant metals and limiting the content of relevant metals in materials, especially mercury
b	Using a quality assurance system to guarantee the characteristics of the waste materials used
c	Using effective dust removal techniques as set out in BAT 17

BAT-associated emission levels

See Table 5.

Table 5

BAT-associated emission levels for metals from the flue-gases of kiln firing processes

Metals	Unit	BAT-AEL (average over the sampling period (spot measurements, for at least half an hour))
Hg	mg/Nm^3	< 0,05 (2)
Σ (Cd, Tl)	mg/Nm^3	< 0,05 (1)
Σ (As, Sb, Pb, Cr, Co, Cu, Mn, Ni, V)	mg/Nm^3	< 0,5 (1)

(1) Low levels have been reported based on the quality of the raw materials and the fuels.
(2) Low levels have been reported based on the quality of the raw materials and the fuels. Values higher than 0,03 mg/Nm^3 have to be further investigated. Values close to 0,05 mg/Nm^3 require consideration of additional techniques (e.g. lowering of the flue-gas temperature, activated carbon).

1.2.9 *Process losses/waste*

29. In order to reduce solid waste from the cement manufacturing process along with raw material savings, BAT is to:

	Technique	Applicability
a	Reuse collected dusts in the process, wherever practicable	Generally applicable but subject to dust chemical composition
b	Utilise these dusts in other commercial products, when possible	The utilisation of the dusts in other commercial products may not be within the control of the operator

Description

Collected dust can be recycled back into the production processes whenever practicable. This recycling may take place directly into the kiln or kiln feed (the alkali metal content being the limiting factor) or by blending with finished cement products. A quality assurance procedure might be required when the collected dusts are recycled back into the production processes. Alternative uses may be found for material that cannot be recycled (e.g. additive for flue-gas desulphurisation in combustion plants).

1.3 **BAT conclusions for the lime industry**

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all installations in the lime industry.

1.3.1 *General primary techniques*

30. In order to reduce all kiln emissions and use energy efficiently, BAT is to achieve a smooth and stable kiln process, operating close to the process parameter set points by using the following techniques:

	Technique
a	Process control optimisation, including computer-based automatic control
b	Using modern, gravimetric solid fuel feed systems and/or gas flow meters

Applicability

Process control optimisation is applicable to all lime plants to varying degrees. Complete process automation is generally not achievable due to the uncontrollable variables, i.e. quality of the limestone.

31. In order to prevent and/or reduce emissions, BAT is to carry out a careful selection and control of the raw materials entering the kiln.

Description

Raw materials entering the kiln have a significant effect on air emissions due to their impurities content; hence, a careful selection of raw materials may reduce these emissions at source. For example, the variations of sulphur and chlorine contents in the limestone/dolomite have an effect on the range of the SO_2 and HCl emissions in the flue-gas, while the presence of organic matter has an influence on TOC and CO emissions.

Applicability

The applicability depends on the (local) availability of raw materials with low impurities content. The type of final product and the type of kiln used may represent an additional constraint.

1.3.2 *Monitoring*

32. BAT is to carry out monitoring and measurements of process parameters and emissions on a regular basis and to monitor emissions in accordance with the relevant EN standards or, if EN standards are not available, ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality, including the following:

	Technique	Applicability
a	Continuous measurements of process parameters demonstrating the process stability, such as temperature, O_2 content, pressure, flow rate and CO emissions	Applicable to kiln processes
b	Monitoring and stabilising of critical process parameters, e.g. fuel feed, regular dosage and excess oxygen	
c	Continuous or periodic measurements of dust, NO_x, SO_x, CO emissions and NH_3 emissions when SNCR is applied	Applicable to kiln processes
d	Continuous or periodic measurements of HCl and HF emissions in case wastes are co-incinerated	Applicable to kiln processes
e	Continuous or periodic measurements of TOC emissions or continuous measurements in case wastes are co-incinerated	Applicable to kiln processes
f	Periodic measurements of PCDD/F and metal emissions	Applicable to kiln processes
g	Continuous or periodic measurements of dust emissions	Applicable to non-kiln processes For small sources (<10 000 Nm^3/h) the frequency of the measurements should be based on a maintenance management system

Description

The selection between continuous or periodic measurements mentioned in BAT 32(c) to 32(f) is based on the emission source and the type of pollutant expected.

For periodic measurements of dust, NO_x, SO_x and CO emissions, a frequency of once a month and up to once a year at the time of normal operating conditions is given as an indication.

For periodic measurements of PCDD/F, TOC, HCl, HF, metal emissions, a frequency appropriate to the raw materials and fuels that are used in the process should be applied.

1.3.3 *Energy consumption*

33. In order to reduce/minimise thermal energy consumption, BAT is to use a combination of the following techniques:

	Technique	Description	Applicability
a	Applying improved and optimised kiln systems and a smooth and stable kiln process, operating close to the process parameter set points, through: I. process control optimisation II. heat recovery from flue-gases (e.g. use of surplus heat from rotary kilns to dry limestone for other processes such as limestone milling) III. modern, gravimetric solid fuel feed systems IV. maintenance of the equipment (e.g. air tightness, erosion of refractory) V. the use of optimised grain size of stone	Maintaining kiln control parameters close to their optimum values has the effect of reducing all consumption parameters due to, among other things, reduced numbers of shutdowns and upset conditions. The use of optimised grain size of stone is subject to raw material availability	Technique (a) II is applicable only to long rotary kilns (LRK)
b	Using fuels with characteristics which have a positive influence on thermal energy consumption	The characteristics of fuels, e.g. high calorific value and low moisture content can have a positive effect on the thermal energy consumption	The applicability depends on the technical possibility to feed the selected fuel into the kiln and on the availability of suitable fuels (e.g. high calorific value and low humidity) which may be impacted by the energy policy of the Member State
c	Limiting excess air	A decrease of excess air used for combustion has a direct effect on fuel consumption since high percentages of air require more thermal energy to heat up the excess volume. Only in LRK and PRK the limitation of excess air has an impact on thermal energy consumption. The technique has a potential of increasing TOC and CO emission	Applicable to LRK and PRK within the limits of a potential overheating of some areas in the kiln with consequent deterioration of the refractory lifetime

BAT-associated consumption levels

See Table 6.

Table 6

BAT-associated levels for thermal energy consumption in the lime and dolime industry

Kiln type	Thermal energy consumption [1] GJ/tonne of product
Long rotary kilns (LRK)	6,0 – 9,2
Rotary kilns with preheater (PRK)	5,1 – 7,8
Parallel flow regenerative kilns (PFRK)	3,2 – 4,2
Annular shaft kilns (ASK)	3,3 – 4,9

Kiln type	Thermal energy consumption [1] GJ/tonne of product
Mixed feed shaft kilns (MFSK)	3,4 – 4,7
Other kilns (OK)	3,5 – 7,0

[1] Energy consumption depends on the type of product, the product quality, the process conditions and the raw materials

34. In order to minimise electrical energy consumption, BAT is to use one or a combination of the following techniques:

	Technique
a	Using power management systems
b	Using optimised grain size of limestone
c	Using grinding equipment and other electricity based equipment with high energy efficiency

Description – Technique (b)

Vertical kilns can usually burn only coarse limestone pebbles. However, rotary kilns with higher energy consumption can also valorise small fractions and new vertical kilns can burn small granules from 10 mm. The larger granules of kiln feed stone are used more in vertical kilns than in rotary kilns.

1.3.4 *Consumption of limestone*

35. In order to minimise limestone consumption, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Specific quarrying, crushing and well directed use of limestone (quality, grain size)	Generally applicable in the lime industry; however, stone processing is dependent on the limestone quality
b	Selecting kilns applying optimised techniques which allow for operating with a wider range of limestone grain sizes to make optimum use of quarried limestone	Applicable to new plants and major upgrades of kiln. Vertical kilns can in principle only burn coarse limestone pebbles. Fine lime PFRK and/or rotary kilns can operate with smaller limestone grain sizes

1.3.5 *Selection of fuels*

36. In order to prevent/reduce emissions, BAT is to carry out a careful selection and control of fuels entering the kiln.

Description

Fuels entering the kiln may have a significant effect on air emissions due to their impurities content. The content of sulphur (for long rotary kilns in particular), nitrogen and chlorine have an effect on the range of the SO_x, NO_x and HCl emissions in the flue-gas. Depending on the chemical composition of the fuel and the type of kiln used, the choice of appropriate fuels or a fuel mix can lead to emissions reductions.

Applicability

Except for mixed feed shaft kilns, all types of kilns can operate with all types of fuels and fuel mixtures subject to fuels availability which may be impacted by the energy policy of the Member State. The selection of fuel also depends on the desired quality of the final product, the technical possibility to feed the fuel into the selected kiln, and economic considerations.

1.3.5.1 Use of waste fuels

1.3.5.1.1 Waste quality control

37. In order to guarantee the characteristics of waste to be used as fuel in a lime kiln, BAT is to apply the following techniques:

	Technique
a	Apply a quality assurance system to guarantee and control the characteristics of wastes and to analyse any waste that is to be used as fuel in the kiln for: I. constant quality II. physical criteria, e.g. emissions formation, coarseness, reactivity, burnability, calorific value III. chemical criteria, e.g. total chlorine content, sulphur, alkali, and phosphate content and relevant metals content (e.g. total chromium, lead, cadmium, mercury, thallium)
b	Control the amount of relevant components for any waste that is to be used as fuel, such as total halogen content, metals (e.g. total chromium, lead, cadmium, mercury, thallium) and sulphur

1.3.5.1.2 Waste feeding into the kiln

38. In order to prevent/reduce emissions occurring from the use of waste fuels into the kiln, BAT is to use the following techniques:

	Technique
a	To use appropriate burners for feeding suitable wastes depending on kiln design and kiln operation
b	To operate in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of 850 °C for 2 seconds
c	To raise the temperature to 1 100 °C if hazardous wastes with a content of more than 1 % of halogenated organic substances, expressed as chlorine, are co-incinerated
d	To feed wastes continuously and constantly
e	To stop feeding waste for operations such as start-ups and/or shutdowns when appropriate temperatures and residence times cannot be reached, as mentioned in (b) and (c) above

1.3.5.1.3 Safety management for the use of hazardous waste materials

39. In order to prevent accidental emissions, BAT is to use safety management for the storage, handling and feeding into the kiln of hazardous waste materials.

Description

The use of a safety management for the storage, handling and feeding of hazardous waste materials consists of a risk-based approach according to the source and type of waste, for the labelling, checking, sampling and testing of waste to be handled.

1.3.6 *Dust emissions*

1.3.6.1 Diffuse dust emissions

40. In order to minimise/prevent diffuse dust emissions from dusty operations, BAT is to use one or a combination of the following techniques:

	Technique
a	Enclosure/encapsulation of dusty operations, such as grinding, screening and mixing
b	Use of covered conveyors and elevators, which are constructed as closed systems, if dust emissions are likely to be released from dusty material
c	Use of storage silos with adequate capacity, level indicators with cut out switches and with filters to deal with dust-bearing air displaced during filling operations
d	Use of a circulation process which is favoured for pneumatic conveying systems

	Technique
e	Material handling in closed systems maintained under negative pressure and dedusting of the suction air by a fabric filter before being emitted into the air
f	Reduction of air leakage and spillage points, completion of installation
g	Proper and complete maintenance of the installation
h	Use of automatic devices and control systems
i	Use of continuous trouble-free operations
j	Use of flexible filling pipes equipped with a dust extraction system for loading lime which are positioned at the loading floor of the lorry

Applicability

In raw material preparation operations, like crushing and sieving, dust separation is not normally needed, because of the moisture content of the raw material.

41. In order to minimise/prevent diffuse dust emissions from bulk storage areas, BAT is to use one or a combination of the following techniques:

	Technique
a	Enclose storage locations using screening, walling or vertical greenery (artificial or natural wind barriers for open pile wind protection)
b	Use product silos and closed, fully-automated raw material storages. These types of storage are equipped with one or more fabric filters to prevent diffuse dust formation in loading and unloading operations
c	Reduce diffuse dust emissions at stockpiles by using sufficient humidification of stockpile charging and discharging points and the use of conveyor belts with adjustable height. When using humidification or spraying measures/techniques, the ground can be sealed and the surplus water can be gathered, and if necessary this can be treated and used in closed cycles
d	Reduce diffuse dust emissions at charging or discharging points of storage sites if they cannot be avoided, by matching the discharge height to the varying height of the heap, if possible automatically, or by reduction of the unloading velocity
e	Keep the locations wet, especially dry areas, using spraying devices and clean them by cleaning lorries
f	Use vacuum systems during removal operations. New buildings can easily be equipped with stationary vacuum cleaning systems, while existing buildings are normally better fitted with mobile systems and flexible connections
g	Reduce diffuse dust emissions arising in areas used by lorries, by paving these areas when possible and keeping the surface as clean as possible. Wetting the roads can reduce diffuse dust emissions, especially during dry weather. Good housekeeping practices can be used in order to keep diffuse dust emissions to a minimum

1.3.6.2 Channelled dust emissions from dusty operations other than those from kiln firing processes

42. In order to reduce channelled dust emissions from dusty operations other than those from kiln firing processes, BAT is to use one of the following techniques and to use a maintenance management system which specifically addresses the performance of filters:

	Technique (1) (2)	Applicability
a	Fabric filter	Generally applicable to milling and grinding plants and subsidiary processes in the lime industry; material transport; and storage and loading facilities. The applicability of fabric filters in hydrating lime plants may be limited by the high moisture and low temperature of the flue-gases
b	Wet scrubbers	Mainly applicable to hydrating lime plants

(1) A description of the techniques is provided in Section 1.6.1.
(2) If necessary, centrifugal separators/cyclones can be used as pretreatment of the flue-gases.

BAT-associated emission levels

See Table 7.

Table 7

BAT-associated emission levels for channelled dust emissions from dusty operations other than those from kiln firing processes

Technique	Unit	BAT-AEL (daily average or average over the sampling period (spot measurements for at least half an hour))
Fabric filter	mg/Nm^3	< 10
Wet scrubber	mg/Nm^3	< 10 – 20

It should be noted that for small sources (< 10 000 Nm^3/h) a priority approach regarding the frequency for checking the performance of the filter has to be taken into account (see BAT 32).

1.3.6.3 Dust emissions from kiln firing processes

43. In order to reduce dust emissions from the flue-gases of kiln firing processes, BAT is to use flue-gas cleaning with a filter. One or a combination of the following techniques can be used:

	Technique (1)	Applicability
a	ESP	Applicable to all kiln systems
b	Fabric filter	Applicable to all kiln systems
c	Wet dust separator	Applicable to all kiln systems
d	Centrifugal separator/cyclone	Centrifugal separators are only suitable as pre-separators and can be used to pre-clean the flue-gases from all kiln systems

(1) A description of the techniques is provided in Section 1.6.1.

BAT-associated emission levels

See Table 8.

Table 8

BAT-associated emission levels for dust emissions from the flue-gases of kiln firing processes

Technique	Unit	BAT-AEL (daily average value or average over the sampling period (spot measurements for at least half an hour))
Fabric filter	mg/Nm^3	< 10
ESP or other filters	mg/Nm^3	< 20 (*)

(*) In exceptional cases where the resistivity of dust is high, the BAT-AEL could be higher, up to 30 mg/Nm^3, as the daily average value.

1.3.7 *Gaseous compounds*

1.3.7.1 Primary techniques for reducing emissions of gaseous compounds

44. In order to reduce the emissions of gaseous compounds (i.e. NO_x, SO_x, HCl, CO, TOC/VOC, volatile metals) from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Careful selection and control of substances entering the kiln	Generally applicable
b	Reducing the pollutant precursors in fuels and, if possible, in raw materials, i.e. I. selecting fuels, where available, with low contents of sulphur (for long rotary kilns in particular), nitrogen and chlorine II. selecting raw materials, if possible, with low contents of organic matter III. selecting suitable waste fuels for the process and the burner	Generally applicable in the lime industry subject to local availability of raw materials and fuels, the type of kiln used, the desired product qualities and the technical possibility of feeding the fuels into the selected kiln
c	Using process optimisation techniques to ensure an efficient absorption of sulphur dioxide (e.g. efficient contact between the kiln gases and the quicklime)	Applicable to all lime plants. In general, complete process automation is not achievable due to uncontrollable variables, i.e. quality of the limestone

1.3.7.2 NO_x emissions

45. In order to reduce the emissions of NO_X from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Primary techniques	
	I. Appropriate fuel selection along with limitation of nitrogen content in the fuel	Generally applicable in the lime industry subject to fuel availability which may be impacted by the energy policy of the Member State and to the technical possibility to feed a certain type of fuel into the selected kiln
	II. Process optimisation including flame shaping and temperature profile	Optimisation of process and process control can be applied in lime manufacturing but is subject to the final product quality
	III. Burner design (low NO_X burner) ([1])	Low NO_X burners are applicable to rotary kilns and to annular shaft kilns presenting conditions of high primary air. PFRKs and other shaft kilns have flameless combustion, thus rendering low NO_X burners not applicable to this kiln type
	IV. Air staging ([1])	Not applicable to shaft kilns. Applicable only to PRK but not when hard burned lime is produced. The applicability may be limited by constraints imposed by the type of final product, due to possible overheating in some areas of the kiln and consequent deterioration of the refractory lining
b	SNCR ([1])	Applicable to Lepol rotary kilns. See also BAT 46

([1]) A description of the techniques is provided in Section 1.6.2

BAT-associated emission levels

See Table 9.

Table 9

BAT-associated emission levels for NO_x from flue-gases of kiln firing processes in the lime industry

Kiln type	Unit	BAT-AEL (daily average value or average over the sampling period (spot measurements for at least half an hour), stated as NO_2)
PFRK, ASK, MFSK, OSK	mg/Nm^3	100 – 350 (1) (3)
LRK, PRK	mg/Nm^3	< 200 – 500 (1) (2)

(1) The higher ends of the ranges are related to the production of dolime and hard burned lime. Higher levels than the upper end of the range may be associated with the production of sintered dolime.
(2) For LRK and PRK with shaft producing hard burned lime, the upper level is up to 800 mg/Nm^3
(3) Where primary techniques as indicated in BAT 45 (a)I are not sufficient to reach this level and where secondary techniques are not applicable to reduce the NO_x emissions to 350 mg/Nm^3, the upper level is 500 mg/Nm^3, especially for hard burned lime and for the use of biomass as fuel.

46. When SNCR is used, BAT is to achieve efficient NO_x reduction, while keeping the ammonia slip as low as possible, by using the following technique:

	Technique
a	To apply an appropriate and sufficient reduction efficiency along with a stable operating process
b	To apply a good stoichiometric ratio and distribution of ammonia in order to achieve the highest efficiency of NO_x reduction and to reduce the ammonia slip
c	To keep the emissions of NH_3 slip (due to unreacted ammonia) from the flue-gases as low as possible, taking into account the correlation between the NO_x abatement efficiency and the NH_3 slip.

Applicability

Applicable only to Lepol rotary kilns, where the ideal temperature range of 850 to 1 020 °C is accessible. See also BAT 45, technique (b).

BAT-associated emission levels

The BAT-AEL for the emissions of NH_3 slip from the flue-gases is <30 mg/Nm^3, as the daily average value or average over the sampling period (spot measurements for at least half an hour).

1.3.7.3 SO_x emissions

47. In order to reduce the emissions of SO_x from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Process optimisation to ensure an efficient absorption of sulphur dioxide (e.g. efficient contact between the kiln gases and the quicklime)	Process control optimisation is applicable to all lime plants
b	Selecting fuels with a low sulphur content	Generally applicable, subject to fuel availability in particular for use in long rotary kilns (LRK), due to high SO_x emissions
c	Using absorbent addition techniques (e.g. absorbent addition, dry flue-gas cleaning with a filter, wet scrubber, or activated carbon injection) (1)	Absorbent addition techniques are, in principle, applicable in the lime industry; however, this technique had not yet been applied in the lime sector in 2007. Particularly for rotary lime kilns further investigation is required in order to assess its applicability

(1) A description of the techniques is provided in Section 1.6.3

BAT-associated emission levels

See Table 10.

Table 10

BAT-associated emission levels for SO_x from flue-gases of kiln firing processes in the lime industry

Kiln type	Unit	BAT-AEL (1) (2) (daily average value or average over the sampling period (spot measurements for at least half an hour), SO_x expressed as SO_2)
PFRK, ASK, MFSK, OSK, PRK	mg/Nm^3	< 50 – 200
LRK	mg/Nm^3	< 50 – 400

(1) The level depends on the initial SO_x level in the flue-gas and on the reduction technique used.
(2) For the production of sintered dolime using the 'double- pass process', SO_x emissions might be higher than the upper end of the range.

1.3.7.4 CO emissions and CO trips

1.3.7.4.1 CO emissions

48. In order to reduce the emissions of CO from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique	Applicability
a	Selecting, raw materials with a low content of organic matter	Generally applicable to the lime industry within the constraints of the local availability and composition of raw materials, the type of kiln used and the quality of the final product
b	Using process optimisation techniques to achieve a stable and complete combustion	Applicable to all lime plants. In general, complete process automation is not achievable due to uncontrollable variables, i.e. quality of the limestone

In this context, see also BAT 30 and 31 in Section 1.3.1 and BAT 32 in Section 1.3.2.

BAT-associated emission levels

See Table 11.

Table 11

BAT-associated emission levels for CO from the flue-gas of kiln firing processes

Kiln type	Unit	BAT-AEL (1) (2) (daily average value or average over the sampling period (spot measurements for at least half an hour))
PFRK, OSK, LRK, PRK	mg/Nm^3	< 500

(1) Emissions can be higher depending on raw materials used and/or type of lime produced, e.g. hydraulic lime.
(2) BAT-AEL does not apply to MFSK and ASK.

1.3.7.4.2 Reduction of CO trips

49. In order to minimise the frequency of CO trips when using electrostatic precipitators, BAT is to use the following techniques:

	Technique
a	Manage CO trips in order to reduce the ESP downtime
b	Continuous automatic CO measurements by means of monitoring equipment with a short response time and situated close to the CO source

Description

For safety reasons, due to the risk of explosions, ESPs will have to shut down during elevated CO levels in the flue-gases. The following techniques prevent CO trips and, therefore, reduce ESP shutdown times:

— control of the combustion process

— control of the organic load of raw materials

— control of the quality of the fuels and fuel feeding system.

Disruptions predominantly happen during the start-up operation phase. For safe operation, the gas analysers for ESP protection have to be online during all operational phases and the ESP downtime can be reduced by using a backup monitoring system maintained in operation.

The continuous CO monitoring system needs to be optimised for reaction time and should be located close to the CO source, e.g. at a preheater tower outlet, or at a kiln inlet in the case of a wet kiln application.

Applicability

Generally applicable to rotary kilns fitted with electrostatic precipitators (ESPs).

1.3.7.5 Total organic carbon emissions (TOC)

50. In order to reduce the emissions of TOC from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique
a	Applying general primary techniques and monitoring (see also BAT 30 and 31 in Section 1.3.1, and BAT 32 in Section 1.3.2)
b	Avoid feeding raw materials with a high content of volatile organic compounds into the kiln system (except for hydraulic lime production)

Applicability

For applicability of general primary techniques and monitoring see BAT 30 and 31 in Section 1.3.1, and BAT 32 in Section 1.3.2.

Technique (b) is generally applicable to the lime industry, subject to local raw materials availability and/or the type of lime produced.

BAT-associated emission levels

See Table 12.

Table 12

BAT-associated emission levels for TOC from the flue-gas of kiln firing processes

Kiln type	Unit	BAT-AEL (1) (daily average value or average over the sampling period (spot measurements for at least half an hour))
LRK, PRK	mg/Nm^3	< 10
ASK, MFSK (2), PFRK (2)	mg/Nm^3	< 30

(1) Level can be higher depending on the content of organic matter of raw materials used and/or the type of lime produced, in particular for the production of natural hydraulic lime.
(2) In exceptional cases, the level can be higher.

1.3.7.6 Hydrogen chloride (HCl) and hydrogen fluoride (HF) emissions

51. In order to reduce the emissions of HCl and the emissions of HF from the flue-gas of kiln firing processes, when using waste, BAT is to use the following primary techniques:

	Technique
a	Using conventional fuels with a low chlorine and fluorine content
b	Limiting the amount of chlorine and fluorine content for any waste that is to be used as fuel in a lime kiln

Applicability

The techniques are generally applicable in the lime industry but subject to local availability of suitable fuel.

BAT-associated emission levels

See Table 13.

Table 13

BAT-associated emission levels for HCl and HF emissions from the flue-gas of kiln firing processes, when using wastes

Emission	Unit	BAT-AEL (daily average value or the average value over the sampling period (spot measurements, for at least half an hour))
HCl	mg/Nm^3	< 10
HF	mg/Nm^3	< 1

1.3.8 *PCDD/F emissions*

52. In order to prevent or reduce the emissions of PCDD/F from the flue-gas of kiln firing processes, BAT is to use one or a combination of the following primary techniques:

	Technique
a	Selecting fuels with a low chlorine content
b	Limiting the copper input through the fuel
c	Minimising the residence time of the flue-gases and the oxygen content in zones where the temperatures range between 300 and 450 °C

BAT-associated emission levels

The BAT-AELs are < 0,05 – 0,1 ng PCDD/F I-TEQ/Nm^3, as the average over the sampling period (6 – 8 hours).

1.3.9 *Metal emissions*

53. In order to minimise the emissions of metals from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques:

	Technique
a	Selecting fuels with a low content of metals
b	Using a quality assurance system to guarantee the characteristics of the waste fuels used
c	Limiting the content of relevant metals in materials, especially mercury
d	Using one or a combination of dust removal techniques as set out in BAT 43

BAT-associated emission levels

See Table 14.

Table 14

BAT associated emission levels for metals from the flue-gases of kiln firing processes, when using wastes

Metals	Unit	BAT-AEL (average over the sampling period (spot measurements for at least half an hour))
Hg	mg/Nm^3	< 0,05
Σ (Cd, Tl)	mg/Nm^3	< 0,05
Σ (As, Sb, Pb, Cr, Co, Cu, Mn, Ni, V)	mg/Nm^3	< 0,5

NB: Low levels were reported when applying techniques as mentioned in BAT 53 (a) – (d).

Furthermore in this context, see also BAT 37 (Section 1.3.5.1.1) and BAT 38 (Section 1.3.5.1.2).

1.3.10 *Process losses/waste*

54. In order to reduce the solid wastes from the lime manufacturing processes and to save raw materials, BAT is to use the following techniques:

	Technique	Applicability
a	Reuse the collected dust or other particulate matter (e.g. sand, gravel) in the process	Generally applicable whenever practicable
b	Utilise dust, off-specification quicklime and off-specification hydrated lime in selected commercial products	Generally utilised in different kinds of selected commercial products, whenever practicable

1.4 **BAT conclusions for the magnesium oxide industry**

Unless otherwise stated, the BAT conclusions presented in this section can be applied to all installations in the magnesium oxide industry (dry process route).

1.4.1 *Monitoring*

55. BAT is to carry out monitoring and measurements of process parameters and emissions on a regular basis and to monitor emissions in accordance with the relevant EN standards or, if EN standards are not available, ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality, including the following:

	Technique	Applicability
a	Continuous measurements of process parameters demonstrating the process stability, such as temperature, O_2 content, pressure, flow rate	Generally applicable to kiln processes
b	Monitoring and stabilising critical process parameters, i.e. raw material and fuel feed, regular dosage and excess oxygen	
c	Continuous or periodic measurements of dust, NO_x, SO_x and CO emissions	Generally applicable to kiln processes
d	Continuous or periodic measurements of dust emissions	Applicable to non-kiln processes. For small source (< 10 000 Nm^3/h) the frequency of the measurements or performance check should be based on a maintenance management system

Description

The selection between continuous or periodic measurements mentioned in BAT 55 (c) is based on the emission source and the type of pollutant expected.

For periodic measurements for dust, NO_x, SO_x and CO emissions from kiln processes, a frequency of once a month and up to once a year and at the time of normal operating conditions is given as an indication.

1.4.2 *Energy consumption*

56. In order to reduce thermal energy consumption, BAT is to use a combination of the following techniques:

	Technique	Description	Applicability
a	Applying improved and optimised kiln systems and a smooth and stable kiln process by applying: I. process control optimisation II. heat recovery from flue-gases from kiln and coolers	Heat recovery from flue-gases by the preliminary heating of the magnesite can be used in order to reduce fuel energy use. Heat recovered from the kiln can be used for drying fuels, raw materials and some packaging materials	Process control optimisation is applicable to all kiln types used in the magnesia industry.
b	Using fuels with characteristics which have a positive influence on thermal energy consumption	The characteristics of fuels, e.g. high calorific value and low moisture content have a positive effect on the thermal energy consumption	Generally applicable subject to availability of the fuels, the type of kilns used, the desired product qualities and the technical possibilities of injecting the fuels into the kiln.
c	Limiting excess air	The excess oxygen level to obtain the required quality of the products and for optimal combustion is usually in practice about 1 – 3 %	Generally applicable

BAT-associated consumption levels

The BAT-associated thermal energy consumption is 6 – 12 GJ/t, depending on the process and the products [1].

57. In order to minimise electrical energy consumption, BAT is to use one or a combination of the following techniques:

	Technique
a	Using power management systems
b	Using grinding equipment and other electricity based equipment with high energy efficiency

1.4.3 *Dust emissions*

1.4.3.1 Diffuse dust emissions

58. In order to minimise/prevent diffuse dust emissions from dusty operations, BAT is to use one or a combination of the following techniques:

	Technique
a	Simple and linear site layout
b	Good housekeeping of buildings and roads, along with proper and complete maintenance of the installation
c	Watering of raw material piles
d	Enclosure/encapsulation of dusty operations, such as grinding and screening
e	Use of covered conveyors and elevators, which are constructed as closed systems, if dust emissions are likely to be released from dusty material

[1] This range only reflects information provided for the magnesium oxide chapter of the BREF. More specific information about best performing techniques along with the products produced was not provided.

	Technique
f	Use of storage silos with adequate capacities and equipping them with filters to deal with dust-bearing air displaced during filling operations
g	A circulation process is favoured for pneumatic conveying systems
h	Reduction of air leakage and spillage points
i	Use of automatic devices and control systems
k	Use of continuous trouble-free operations

1.4.3.2 Channelled dust emissions from dusty operations other than kiln firing processes

59. In order to reduce channelled dust emissions from dusty operations other than those from kiln firing processes, BAT is to use flue-gas cleaning with a filter by applying one or a combination of the following techniques, and to use a maintenance management system which specifically addresses the performance of techniques:

	Technique [1]	Applicability
a	Fabric filters	Generally applicable to all units in the magnesium oxide manufacturing process, especially for dusty operations, screening, grinding and milling
b	Centrifugal separators/ cyclones	Because of the system-dependent limited degree of separation, cyclones are mainly applicable as preliminary separators for coarse dust and flue-gases
c	Wet dust separators	Generally applicable

[1] A description of the techniques is provided in Section 1.7.1

BAT-associated emission levels

The BAT-AEL for channelled dust emissions from dusty operations other than those from kiln firing processes is < 10 mg/Nm^3, as daily average or average over the sampling period (spot measurements, for at least half an hour).

It should be noted that for small sources (< 10 000 Nm^3/h) a priority approach, based on a maintenance management system regarding the frequency for checking the performance of the filter has to be taken into account (see BAT 55).

1.4.3.3 Dust emissions from the kiln firing process

60. In order to reduce dust emissions from the flue-gases of kiln firing processes, BAT is to use flue-gas cleaning with a filter by applying one or a combination of the following techniques:

	Technique [1]	Applicability
a	Electrostatic precipitators (ESPs)	ESPs are mainly applicable in rotary kilns. They are applicable for flue-gas temperatures above the dew point and up to 370 – 400 °C
b	Fabric filters	Fabric filters for dust removal from flue-gases can, in principle, be applied for all units in the magnesium oxide manufacturing process. They can be used for flue-gas temperatures above the dew point and up to 280 °C. For the production of caustic calcined magnesia (CCM) and sintered/dead burned magnesia (DBM), due to the high temperatures, the corrosive nature and the high volume of the flue-gases occurring from the kiln firing process, special fabric filters with high temperature-resistant filter material have to be used. However, experience from the magnesia industry producing DBM shows that no suitable equipment is available for flue-gas temperatures of approximately 400 °C for magnesia production

	Technique [1]	Applicability
c	Centrifugal separators/ cyclones	Because of the system-dependent limited degree of separation, cyclones are mainly applicable as preliminary separators for coarse dust and flue-gases
d	Wet dust separators	Generally applicable

[1] A description of the techniques is provided in Section 1.7.1.

BAT-associated emission levels

The BAT-AEL for dust emissions from the flue-gases of kiln firing processes is < 20 – 35 mg/Nm^3 as the daily average value or average over the sampling period (spot measurements, for at least half an hour).

1.4.4 *Gaseous compounds*

1.4.4.1 General primary techniques for reducing emissions of gaseous compounds

61. In order to reduce the emissions of gaseous compounds (i.e. NO_x, HCl, SO_x, CO) from flue-gases of kiln firing processes, BAT is to use one or a combination of the following primary techniques:

	Technique	Applicability
a	Careful selection and control of the substances entering the kiln in order to reduce the pollutant precursors, i.e.: I. selecting fuels with low contents of sulphur, if available, chlorine and nitrogen II. selecting raw materials with low contents of organic matter III. selecting suitable waste fuels for the process and the burner	Generally applicable subject to availability of raw materials and fuels, the type of kiln used, the desired product qualities and the technical possibility of injecting the fuels into the selected kiln. Waste materials can be considered as fuels in the magnesia industry but had not yet been applied in the magnesia industry in 2007
b	Using process optimisation measures/techniques to ensure a smooth and stable kiln process, operating close to the stoichiometric required air	Process control optimisation is applicable to all kiln types used in the magnesia industry. However, a highly sophisticated process control system may be necessary

1.4.4.2 NO_x emissions

62. In order to reduce the emissions of NO_x from the flue-gases of kiln firing processes, BAT is to use a combination of the following techniques:

	Technique	Applicability
a	Appropriate fuel selection along with a limited nitrogen content in the fuel	Generally applicable subject to fuels availability
b	Process optimisation and improved firing technique	Generally applicable in the magnesia industry

BAT-associated emission levels

The BAT-AEL for the emissions of NO_X from the flue-gases of kiln firing processes is < 500 – 1 500 mg/Nm^3, as the daily average value or average over the sampling period (spot measurements for at least half an hour) stated as NO_2. The higher values are related to the high temperature DBM process.

1.4.4.3 CO emissions and CO trips

1.4.4.3.1 CO emissions

63. In order to reduce the emissions of CO from the flue-gases of kiln firing processes, BAT is to use a combination of the following techniques:

	Technique	Description
a	Selecting raw materials with a low content of organic matter	A part of CO emissions results from the organic matter of raw materials thus selection of raw materials with low organic content can reduce CO emissions
b	Process control optimisation	A complete and correct combustion is essential to reduce CO emissions. Air supply from cooler and primary air as well as the draught of the stack fan can be controlled in order to keep an oxygen level of between 1 (sinter) and 1,5 % (caustic) during the combustion. A change of air and fuel charge can reduce CO emissions. Furthermore, CO emissions can be decreased by changing the depth of the burner
c	Feeding fuels controlled, constantly and continuously	Controlled fuel addition includes, e.g.: — using weight feeders and precision rotary valves for petcoke feeding and/or — using flow meters and precision valves for heavy oil or gas feeding regulation to the kiln burner

Applicability

The techniques for the reduction of CO emissions are generally applicable to the magnesia industry. The selection of raw materials with a low content of organic matter is subject to raw materials availability.

BAT-associated emission levels

The BAT-AEL for the emissions of CO from the flue-gases of kiln firing processes is < 50 – 1 000 mg/Nm^3, as the daily average value or average over the sampling period (spot measurements for at least half an hour).

1.4.4.3.2 Reduction of CO trips

64. In order to minimise the number of CO trips when applying ESPs, BAT is to use the following techniques:

	Technique
a	Manage CO trips in order to reduce the ESP downtime
b	Continuous automatic CO measurements by means of monitoring equipment with a short response time and situated close to the CO source

Description

For safety reasons, due to the risk of explosions, ESPs will have to shut down during elevated CO levels in the flue-gases. The following techniques prevent CO trips and, therefore, reduce ESP shutdown times:

— control of the combustion process

— control of the organic load of raw materials

— control of the quality of the fuels and fuel feeding system.

Disruptions predominantly happen during the start-up operation phase. For safe operation, the gas analysers for ESP protection have to be online during all operational phases and the ESP downtime can be reduced by using a backup monitoring system maintained in operation.

The continuous CO monitoring system needs to be optimised for reaction time and should be located close to the CO source, e.g. at a preheater tower outlet, or at a kiln inlet in the case of a wet kiln application.

Applicability

Generally applicable to kilns fitted with electrostatic precipitators (ESPs).

1.4.4.4 SO_x emissions

65. In order to reduce the emissions of SO_x from the flue-gases of kiln firing processes, BAT is to use a combination of the following primary and secondary techniques:

	Technique	Applicability
a	Process optimisation techniques	Generally applicable
b	Selecting fuels with a low sulphur content	Generally applicable subject to availability of low sulphur fuels which may be impacted by the energy policy of the Member State. The selection of fuel also depends on the quality of the final product, technical possibilities and economic considerations
c	A dry absorbent addition technique (sorbent addition into the flue gas stream such as reactive MgO grades, hydrated lime, activated carbon, etc.), in combination with a filter ([1])	Generally applicable
d	Wet scrubber ([1])	The applicability may be limited in arid areas by the large volume of water necessary and the need for waste water treatment and the related cross-media effects

([1]) A description of the measure/technique is provided in Section 1.7.2

BAT-associated emission levels

See Table 15.

Table 15

BAT-associated emission levels for SO_x from flue-gases of kiln firing processes in the magnesia industry

Parameter	Unit	BAT-AEL ([1]) ([2]) (daily average value or average over the sampling period (spot measurements for at least half an hour))
SO_X expressed as SO_2	mg/Nm^3	< 50 – 400 ([3])

([1]) The BAT-AELs depend on the content of sulphur in the raw materials and fuels. The lower end of the range is associated with the use of raw materials with low sulphur content and the use of natural gas; the upper end of the range is associated with the use of raw materials with higher sulphur content and/or the use of sulphur-containing fuels.
([2]) Cross-media effects should be taken into account to assess the best combination of BAT to reduce SO_x emissions.
([3]) When a wet scrubber is not applicable, BAT-AELs depend on the sulphur content of raw materials and fuels. In this case, the BAT-AEL is < 1 500 mg/Nm^3 while ensuring a SO_X emissions removal efficiency of at least 60 %.

1.4.5 *Process losses/waste*

66. In order to reduce/minimise process losses/waste, BAT is to reuse various types of collected magnesium carbonate dusts in the process.

Applicability

Generally applicable, subject to dust chemical composition.

67. In order to reduce/minimise process losses/waste, BAT is to utilise the various types of collected magnesium carbonate dusts in other marketable products when these are not recyclable.

Applicability

The utilisation of magnesium carbonate dusts in other marketable products may not be within the control of the operator.

68. In order to reduce/minimise process losses/waste, BAT is to reuse sludge resulting from the wet process of the flue-gas desulphurisation in the process or in other sectors.

Applicability

The utilisation of sludge resulting from the wet process of the flue-gas desulphurisation in other sectors may not be within the control of the operator.

1.4.6 *Use of wastes as fuels and/or raw materials*

69. In order to guarantee the characteristics of waste to be used as fuels and/or raw materials in magnesium oxide kilns, BAT is to use the following techniques:

	Technique
a	To select suitable wastes for the process and the burner
b	To apply quality assurance systems to guarantee and control the characteristics of wastes and to analyse any waste that is to be used for: I. availability II. constant quality III. physical criteria, e.g. emissions formation, coarseness, reactivity, burnability, calorific value IV. chemical criteria, e.g. chlorine, sulphur, alkali and phosphate content and relevant metals (e.g. total chromium, lead, cadmium, mercury, thallium) content
c	To control the amount of relevant parameters for any waste that is to be used, such as total halogen content, metals (e.g. total chromium, lead, cadmium, mercury, thallium) and sulphur

Applicability

Wastes may be used as fuels and/or raw materials in the magnesia industry (although they had not yet been applied in the magnesia industry in 2007) subject to availability, the type of kiln used, the desired product qualities and the technical possibility of feeding the fuels into the kiln.

DESCRIPTION OF TECHNIQUES

1.5 **Description of techniques for the cement industry**

1.5.1 *Dust emissions*

	Technique	Description
a	Electrostatic precipitators	Electrostatic precipitators (ESPs) generate an electrostatic field across the path of particulate matter in the air stream. The particles become negatively charged and migrate towards positively charged collection plates. The collection plates are rapped or vibrated periodically, dislodging the material so that it falls into collection hoppers below. It is important that ESP rapping cycles be optimised to minimise particulate re-entrainment and thereby minimise the potential to affect plume visibility. ESPs are characterised by their ability to operate under conditions of high temperatures (up to approximately 400 °C) and high humidity. The major disadvantages of this technique are their decreased efficiency with an insulating layer and a build-up of material that may be generated with high chlorine and sulphur inputs. For the overall performance of ESPs, it is important to avoid CO trips Even though there are no technical restrictions on the applicability of ESPs in the various processes in the cement industry, they are not often chosen for cement mill dedusting because of the investment costs and the efficiency (relatively high emissions) during start-ups and shutdowns
b	Fabric filters	Fabric filters are efficient dust collectors. The basic principle of fabric filtration is to use a fabric membrane which is permeable to gas but which will retain the dust. Basically, the filter medium is arranged geometrically. Initially, dust is deposited both on the surface fibres and within the depth of the fabric, but as the surface layer builds up, the dust itself becomes the dominating filter medium. Off-gas can flow either from the inside of the bag outwards or vice versa. As the dust cake thickens, the resistance to gas flow increases. Periodic cleaning of the filter medium is therefore necessary to control the gas pressure drop across the filter. The fabric

	Technique	Description
		filter should have multiple compartments which can be individually isolated in case of bag failure and there should be sufficient of these to allow adequate performance to be maintained if a compartment is taken off line. There should be 'burst bag detectors' in each compartment to indicate the need for maintenance when this happens. Filter bags are available in a range of woven and non-woven fabrics. Modern synthetic fabrics can operate at quite high temperatures of up to 280 °C. The performance of fabric filters is mainly influenced by different parameters, such as compatibility of the filter medium with the characteristics of the flue-gas and the dust, suitable properties for thermal, physical and chemical resistance, such as hydrolysis, acid, alkali, and oxidation and process temperature. Moisture and temperature of the flue-gases have to be taken into consideration during the selection of the technique.
c	Hybrid filters	Hybrid filters are the combination of ESPs and fabric filters in the same device. They generally result from the conversion of existing ESPs. They allow the partial reuse of the old equipment

1.5.2 *NO_x emissions*

	Technique	Description
a	Primary measures/techniques	
	I Flame cooling	The addition of water to the fuel or directly to the flame by using different injection methods, such as injection of one fluid (liquid) or two fluids (liquid and compressed air or solids) or the use of liquid/solid wastes with a high water content reduces the temperature and increases the concentration of hydroxyl radicals. This can have a positive effect on NO_x reduction in the burning zone
	II Low NO_x burners	Designs of low NO_x burners (indirect firing) vary in detail but essentially the fuel and air are injected into the kiln through concentric tubes. The primary air proportion is reduced to some 6 – 10 % of that required for stoichiometric combustion (typically 10 – 15 % in traditional burners). Axial air is injected at high momentum in the outer channel. The coal may be blown through the centre pipe or the middle channel. A third channel is used for swirl air, its swirl being induced by vanes at, or behind, the outlet of the firing pipe. The net effect of this burner design is to produce very early ignition, especially of the volatile compounds in the fuel, in an oxygen-deficient atmosphere, and this will tend to reduce the formation of NO_x. The application of low NO_x burners is not always followed by a reduction of NO_x emissions. The set-up of the burner has to be optimised
	III Mid kiln firing	In long wet and long dry kilns, the creation of a reducing zone by firing lump fuel can reduce NO_x emissions. As long kilns usually have no access to a temperature zone of about 900 – 1 000 °C, mid-kiln firing systems can be installed in order to be able to use waste fuels that cannot pass the main burner (for example tyres). The rate of the burning of fuels can be critical. If it is too slow, reducing conditions can occur in the burning zone, which may severely affect product quality. If it is too high, the kiln chain section can be overheated – resulting in the chains being burned out. A temperature range of less than 1 100 °C excludes the use of hazardous waste with a chlorine content of greater than 1 %
	IV Addition of mineralisers to improve the burnability of the raw meal (mineralised clinker)	The addition of mineralisers, such as fluorine, to the raw material is a technique to adjust the clinker quality and allow the sintering zone temperature to be reduced. By reducing/lowering the burning temperature, NO_x formation is also reduced

	Technique	Description
	V Process optimisation	Optimisation of the process, such as smoothing and optimising the kiln operation and firing conditions, optimising the kiln operation control and/or homogenisation of the fuel feedings, can be applied for reducing NO_x emissions. General primary optimisation measures/techniques, such as process control measures/techniques, an improved indirect firing technique, optimised cooler connections and fuel selection, and optimised oxygen levels have been applied
b	Staged combustion (conventional or waste fuels), also in combination with a precalciner and the use of optimised fuel mix	Staged combustion is applied at cement kilns with an especially designed precalciner. The first combustion stage takes place in the rotary kiln under optimum conditions for the clinker burning process. The second combustion stage is a burner at the kiln inlet, which produces a reducing atmosphere that decomposes a portion of the nitrogen oxides generated in the sintering zone. The high temperature in this zone is particularly favourable for the reaction which reconverts the NO_x to elementary nitrogen. In the third combustion stage, the calcining fuel is fed into the calciner with an amount of tertiary air, producing a reducing atmosphere there, too. This system reduces the generation of NO_x from the fuel, and also decreases the NO_x coming out of the kiln. In the fourth and final combustion stage, the remaining tertiary air is fed into the system as 'top air' for residual combustion
c	SNCR	Selective non-catalytic reduction (SNCR) involves injecting ammonia water (up to 25 % NH_3), ammonia precursor compounds or urea solution into the combustion gas to reduce NO to N_2. The reaction has an optimum effect in a temperature window of about 830 to 1 050 °C, and sufficient retention time must be provided for the injected agents to react with NO
d	SCR	SCR reduces NO and NO_2 to N_2 with the help of NH_3 and a catalyst at a temperature range of about 300 – 400 °C. This technique is widely used for NO_x abatement in other industries (coal fired power stations, waste incinerators). In the cement industry, basically two systems are considered: low dust configuration between a dedusting unit and stack, and a high dust configuration between a preheater and a dedusting unit. Low dust flue-gas systems require the reheating of the flue-gases after dedusting, which may cause additional energy costs and pressure losses. High dust systems are considered preferable for technical and economical reasons. These systems do not require reheating, because the waste gas temperature at the outlet of the preheater system is usually in the right temperature range for SCR operation

1.5.3 *SO_x emissions*

	Technique	Description
a	Absorbent addition	Absorbent is either added to the raw materials (e.g. hydrated lime addition) or injected into the gas stream (e.g. hydrated or slaked lime ($Ca(OH)_2$), quicklime (CaO), activated fly ash with a high CaO content or sodium bicarbonate ($NaHCO_3$)). Hydrated lime can be charged into the raw mill together with the raw material constituents or directly added to the kiln feed. The addition of hydrated lime offers the advantage that the calcium-bearing additive forms reaction products that can be directly incorporated into the clinker-burning process. Absorbent injection into the gas stream can be applied in a dry or wet form (semi-dry scrubbing). The absorbent is injected into the flue-gas path at temperatures close to the water dew point, which results in more favourable conditions for SO_2 capture. In cement kiln systems, this temperature range is usually reached in the area between the raw mill and the dust collector

	Technique	Description
b	Wet scrubber	The wet scrubber is the most commonly used technique for flue-gas desulphurisation in coal-fired power plants. For cement manufacturing processes, the wet process for reducing SO_2 emissions is an established technique. Wet scrubbing is based on the following chemical reaction: $SO_2 + ½ O_2 + 2 H_2O + CaCO_3 \leftrightarrow CaSO_4 \cdot 2 H_2O + CO_2$ SO_x are absorbed by a liquid/slurry which is sprayed in a spray tower. The absorbent is generally calcium carbonate. Wet scrubbing systems provide the highest removal efficiencies for soluble acid gases of all flue-gas desulphurisation (FGD) methods with the lowest excess stoichiometric factors and the lowest solid waste production rate. The technique requires certain amounts of water with a consequent need for waste water treatment

1.6 **Description of techniques for lime industry**

1.6.1 *Dust emissions*

	Technique	Description
a	ESP	A general description of ESPs is provided in Section 1.5.1. ESPs are suitable for use at temperatures above the dew point and up to 400 °C. Furthermore, it is also possible to use ESPs close to, or below, the dew point. Because of high volume flows and relatively high dust loads, mainly rotary kilns without preheaters but also rotary kilns with preheaters are equipped with ESPs. In the case of combination with a quenching tower, excellent performance can be achieved
b	Fabric filter	A general description of fabric filters is provided in Section 1.5.1. Fabric filters are well suited for kilns, milling and grinding plants for quicklime as well as for limestone; lime hydrating plants; material transport; and storage and loading facilities. Often a combination with cyclone prefilters is useful. The operation of fabric filters is limited by the flue-gas conditions such as temperature, moisture, dust load and chemical composition. There are various fabric materials available to resist mechanical, thermal and chemical wear to meet those conditions
c	Wet dust separator	With wet dust separators, dust is eliminated from off-gas streams by bringing the gas flow into close contact with a scrubbing liquid (usually water), so that the dust particles are retained in the liquid and can be rinsed away. There are a number of different types of wet scrubbers available for dust removal. The main types that have been used in lime kilns are multi-cascade/multistage wet scrubbers, dynamic wet scrubbers and venturi wet scrubbers. The majority of wet scrubbers used on lime kilns are multi-cascade/multistage wet scrubbers. Wet scrubbers are chosen when the flue-gas temperatures are close to, or below the dew point. They may also be chosen when space is limited. Wet scrubbers are sometimes used with higher temperature gases, in which case, the water cools the gases and reduces their volume
d	Centrifugal Separator/ cyclone	In a centrifugal separator/cyclone, the dust particles to be eliminated from an off-gas stream are forced out against the outer wall of the unit by centrifugal action and then eliminated through an aperture at the bottom of the unit. Centrifugal forces can be developed by directing the gas flow in a downward spiral motion through a cylindrical vessel (cyclonic separators) or by a rotating impeller fitted in the unit (mechanical centrifugal separators). However, they are only suitable as pre-separators because of their limited particle removal efficiency and they relieve ESPs and fabric filters from high dust loading, and reduce abrasion problems

1.6.2 *NO_x emissions*

	Technique	Description
a	Burner design (low NO_x burner)	The low NO_x burners are useful for reducing the flame temperature and thus reducing thermal and (to some extent) fuel derived NO_x. The NO_x reduction is achieved by supplying rinsing air for lowering the flame temperature or pulsed operation of the burners. Low NO_x burners are designed to reduce the primary air portion which leads to lower NO_x formation whereas common multi-channel burners are operated with a primary air portion of 10 to 18 % of the total combustion air. The higher portion of the primary air leads to a short and intensive flame by the early mixing of hot secondary air and fuel. This results in high flame temperatures along with a creation of a high amount of NO_x formation which can be avoided by using low NO_x burners
b	Air staging	A reducing zone is created by reducing the oxygen supply in the primary reaction zones. High temperatures in this zone are particularly favourable for the reaction which reconverts the NO_x to elementary nitrogen. At later combustion zones, the air and oxygen supply is increased to oxidise the gases formed. Effective air/gas mixing in the firing zone is required to ensure that CO and NO_x are both maintained at low levels. In 2007, air staging had never been applied in the lime sector
c	SNCR	Nitrogen oxides (NO and NO_2) from the flue-gases are removed by selective non-catalytic reduction and converted into nitrogen and water by injecting a reducing agent into the kiln which reacts with the nitrogen oxides. Ammonia or urea is typically used as the reducing agent. The reactions occur at temperatures of between 850 and 1 020 °C, with the optimal range typically between 900 to 920 °C

1.6.3 *SO_x emissions*

	Technique	Description
a	Absorbent addition techniques	The technique involves the addition of an absorbent in dry form directly into the kiln (fed or injected) or in dry or wet form (e.g. hydrated lime or sodium bicarbonate) into the flue-gases in order to remove SO_x emissions. When absorbent is injected into the flue-gases, a sufficient residence time between the injection point and the dust collector (fabric filter or ESP) must be provided in order to obtain an efficient absorption. For rotary kilns, absorption techniques may include: — Use of fine limestone: At a straight rotary kiln fed with dolomite, significant reductions in SO_2 emissions can occur with feedstones which either contain high levels of finely divided limestone or are prone to break up on heating. The finely divided limestone calcines are entrained in the kiln gases and remove SO_2 en route to, and in, the dust collector. — Lime injection into the combustion air: A patented technique (EP 0 734 755 A1) which removes SO_2 emissions from rotary kilns by injecting finely divided quick or hydrated lime into the air fed into the firing hood of the kiln

1.7 **Description of techniques for the magnesia industry (dry process route)**

1.7.1 *Dust emissions*

	Measure/Technique	Description
a	Electrostatic precipitators (ESPs)	A general description of ESPs is provided in Section 1.5.1

	Measure/Technique	Description
b	Fabric filters	A general description of fabric filters is provided in Section 1.5.1 Fabric filters receive high particle retention, typically over 98 % and up to 99 % depending on the particle size. This technique offers the best efficiency on particle collection in comparison to other dust abatement measures/techniques used in the magnesia industry. However, because of the high temperatures of the kiln flue-gases, special filter materials which can tolerate high temperatures have to be used. In DBM manufacturing, filter materials operating with temperatures of up to 250 °C are used, such as PTFE (Teflon) filter material. This filter material shows good resistance to acids or alkalis and a lot of corrosion problems have been solved
c	Cyclones (centrifugal separator)	A general description of cyclones is provided in Section 1.6.1. They are robust equipment and they have a wide operational temperature range with a low energy requirement. Because of the system-dependent limited degree of separation, cyclones are mainly used as preliminary separators for coarse dust and flue-gases
d	Wet dust separators	General description of wet dust separators (also called wet scrubbers) is provided in Section 1.6.1 Wet dust separators can be divided into various types according to their design and working principles, such as the venturi type. This type of wet dust separator has a number of applications in the magnesia industry, including when gas is directed through the narrowest section of the venturi tube, the 'venturi neck', and gas velocities of between 60 and 120 m/s can be achieved. The washing fluids which are fed into the venturi tube neck are diffused into a mist of very fine droplets and are intensively mixed with the gas. The particles separated onto the water droplets become heavier and can be readily drawn off using a drop separator installed in this venturi wet dust separator

1.7.2 *SO_x emissions*

	Technique	Description
a	Absorbent addition technique	The technique involves the injection of an absorbent in dry or wet form (semi-dry scrubbing) into the flue-gases in order to remove SO_x emissions. A sufficient gas residence time between the injection point and the dust collector is very important to obtain highly efficient absorption. Reactive MgO grades can be used as efficient absorbents for SO_2 in the magnesia industry. Despite the lower efficiency compared to other absorbents, the use or reactive MgO grades has a double advantage as it lowers the investment costs and also the filter dust is not contaminated by other substances and can be reused in place of raw materials for the production of magnesia or employed as a fertiliser (magnesium sulphate) minimising waste generation
b	Wet scrubber	In the wet scrubbing technique, SO_x are absorbed by a liquid/slurry which is sprayed countercurrently to the flue-gases in a spray tower. The technique requires an amount of water between 5 and 12 m^3/tonne product, with a consequent need for a waste water treatment

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Provisions on penalties related to legislation on industrial installations

Executive Summary

October 2011

milieu
Law & Policy Consulting

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Provisions on penalties related to legislation on industrial installations

Executive summary

This executive summary brings together the key findings of the project 'Provisions on penalties related to legislation on industrial installations' carried out for DG Environment under Service Contract DG ENV № 070307/2010/569468/SER/C3. The project aims at:

- providing the European Commission and the Member States with an overview of penalties applicable in all 27 Member States for the enforcement of EU air emission legislation
- assess the effectiveness, proportionality and dissuasive nature of these measures
- support Member States in future implementation of legislation on industrial emissions by identifying good practices.

1. Methodology/Background

In order to obtain a comprehensive and detailed analysis of how EU requirements for industrial installations are enforced at Member State level, the study followed a staged approach, starting with a general overview of sanctions in each of the 27 Member States, a detailed review of enforcement in seven selected Member States, including case studies and a workshop, which all fed into the development of a Document on Good Practices which was subject to further consultation with national experts before finalisation.

The general overview of the national legislation and procedures in relation to infringements of the legislation on industrial emissions for the 27 Member States is the first output. It covers the four main directives on air emission, namely

- Directive 2008/1/EC concerning integrated pollution prevention and control;[1]
- Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants;[2]
- Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvent in certain activities and installations;[3]
- Directive 2000/76/EC on the incineration of waste.[4]

National legal experts reviewed for each of the Member States the sanctions in place, administrative, quasi-criminal and criminal, for the main enforceable obligations of the four directives, along with general information on the legal background and enforcement of the directives in each Member State. These national reports served as a basis for analysing the types of sanctions used, the maximum levels of penalties (fines and imprisonment), and any additional sanctions which may also be imposed either in addition, or as an alternative, to such penalties. A comparative analysis of the country overviews

[1] Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version). *Official Journal L 024, 29/01/2008 P. 0008 – 0029.*

[2] Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants. *Official Journal L 309, 27/11/2001 P. 0001 – 0021.*

[3] Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations. *Official Journal L 085, 29/03/1999 P. 0001 – 0022.*

[4] Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste. *Official Journal L 332 , 28/12/2000 P. 0091 – 0111.*

served as a basis to frame the detailed review of enforcement in seven Member States and select those Member States - Denmark, France, Germany, Hungary, Spain, The Netherlands and UK.

The report '*Overview of provisions on penalties related to legislation on industrial installations in the Member States'* is presented as a stand-alone document, together with the 27 individual country overviews.

The second output of the study was a guidance document aimed at identifying good practices in the enforcement procedures and sanctions in place in Member States for infringement of legislation on industrial emissions, with a particular focus on the enforcement of Directive 2008/1/EC (the IPPC Directive). This document was primarily based on a detailed analysis of the national enforcement systems and applicable sanctions relating to the IPPC Directive in seven Member States (UK, Germany, France, Hungary, the Netherlands, Denmark and Spain). Case studies were used to illustrate how each country's system operates in practice as well as to determine the extent to which the sanctions imposed for non-compliance were deemed to be effective, proportionate and dissuasive.

Following the detailed country studies, a stakeholder workshop was held at DG Environment on 27 June 2011. The workshop focused on the effectiveness, proportionality and dissuasiveness of sanctions, and included presentations on the project methodology and case studies illustrating the enforcement procedures and mechanisms in selected Member States. This was followed by a round-table discussion by the participants. Following the workshop, a draft guidance document was prepared to highlight good practices based on examples drawn from the detailed national studies where successful approaches to enforcement were identified. The Document on Good Practices also serves to clarify how the notions of dissuasiveness, proportionality and effectiveness are interpreted by Member States. The country studies and the draft guidance document were then submitted to the participants of the workshop for comments. These comments were incorporated into the final Document on Good Practices.

The Document on Good Practices is presented as a stand-alone document, together with the seven detailed country studies.

2. Main conclusions and findings

The project showed that there is a range of different factors and elements which concur to the effectiveness, dissuasiveness and proportionality of penalties.

These three criteria are currently undefined by EU legislation. However, by analysing the relevant literature and limited case law available, the following definitions were devised:

- *Effectiveness:* penalties are capable of ensuring compliance with EU law and achieving the desired objective
- *Proportionality:* penalties adequately reflect the gravity of the violation and do not go beyond what is necessary to achieve the desired objective
- *Dissuasiveness:* penalties have a deterrent effect on the offender which should be prevented from repeating the offence and on the other potential offenders to commit the said offence

A number of challenges arise from these definitions, primarily due to the fact that the three criteria are closely interlinked and there is a lack of empirical and evidential analysis of the penalties as applied in practice. In addition, the application of these criteria should be guided by the specific circumstances of individual cases and viewed within the wider context of the national enforcement systems within

Member States. These challenges are further complicated by the significant differences between national legal and institutional frameworks and practices and economic situations of each Member State, and furthermore, in the types of sanctions applied (e.g. administrative, criminal, quasi-criminal) and in the ranges and levels of penalties imposed for infringement. This is also linked to the fact that there is no EU mandatory level of 'minimum' or 'maximum' fine for non-compliance with a particular legislative provision.

Most Member States provide for both administrative and criminal sanctions. However, several common law countries, or countries with a common law influence, including Ireland, Cyprus and Malta, have no administrative fines in place. Of interest, the introduction of administrative fines in the UK suggests that these are an efficient instrument for enforcement. While in some countries administrative sanctions are viewed as having the same repressive and preventive character as criminal ones, in some Member States there is a substantial distinction between the two types of sanction. In such cases this distinction reflects the aim of the administrative sanction to re-establish the public order rather than to allocate social blame. In most countries, the key difference between the two types of sanction is the body responsible and the procedure used to impose the sanction. As noted in the Member State overviews, a number of common law countries, or those with a common law influence, do not have specific provisions for both administrative and criminal sanctions relating to industrial installations. In such countries there is not usually a specific and differentiated procedure to impose administrative sanctions. In other Member States, the administrative sanction will be imposed through an administrative procedure while the criminal sanction will be imposed through the criminal procedure.

The majority of Member States have provisions for criminal sanctions for breaches of legislation relating to industrial installations. Most criminal sanctions in those Member States are established through a combination of sectoral legislation transposing the main enforceable requirements, and a single criminal code or act which establishes sanctions for breaches of that sectoral legislation. A number of Member States do not have specific criminal sanctions for some or all of the particular offences covered by the study. However, in most of these cases, general criminal sanctions for environmental damage are provided for by a criminal code or framework environmental law. Where specific criminal sanctions are set for particular offences, general criminal sanctions also apply.

Five Member States use quasi-criminal penalties as a means of enforcement, either in addition to administrative and criminal sanctions or instead of administrative sanctions. In two Member States, quasi-criminal sanctions carry similar penalties to criminal sanctions but involve a simplified procedure, and at first instance are handled by the administrative authorities rather than by the judicial system. In other Member States, quasi-criminal sanctions are used instead of administrative sanctions as an alternative method of enforcement, sitting alongside criminal sanctions and administrative enforcement measures. The use of such sanctions may be conditional upon the offender's negligence or intent and their primary aim is to have deterrent and preventive effect.

One of the main advantages of administrative sanctions is that they allow for communication with the perpetrator, giving the regulator greater flexibility over the types of measures it can use. Fines can also be higher than for criminal proceedings. Criminal sanctions, on the other hand, tend have a stronger dissuasive effect and may be more appropriate for serious, deliberate or repeat offences where there may be significant damage to the environment or human health or need for compensation.

The analysis has identified a number of features that support a differentiation and possible graduation of sanctions, which in turn ensure that sanctions can be effective, proportionate and dissuasive. These include:

1. *The distinction between minor and serious offences:* in several Member States, the legislation itself often distinguishes between minor and serious offences, providing a tool which allows taking into account elements that influence the gravity of the offence. The most commonly met are the existence of a damage to the environment or to human health and the intent as opposed to offences committed by negligence.

2. *The existence of minima or maxima level of fines:* the approach varies greatly across Member States from setting both minima and maxima, to only maxima or none. Besides, maximum fines or imprisonment length also differ greatly, with the highest administrative fines ranging from up to Euros 2,134 to Euros 2,500,000. Of those Member States which impose criminal penalties, the level of fines range from Euros 547 up to an unlimited amount, while the length of imprisonment ranges from thirty days up to 15 years. Some countries have also developed guidance on the level of fines. Due to limited information, it is not possible to draw meaningful conclusions about the levels of fines imposed as compared with these maximum levels. Furthermore, it is not clear whether prescribing minimum or maximum levels of fines supports the setting of proportionate, effective and dissuasive penalties. It is recommended that comprehensive and detailed studies are carried out at national level in this regard.

3. *The differentiation in the level of fines for natural and legal persons:* in some countries, the same penalties apply to natural and legal persons, while in other Member States the penalties are differentiated with higher ones potentially applicable to legal persons. In this perspective, due account should be taken of the possibility to impose additional financial penalties to legal persons such as the seizure of the profit made, a possibility seen as extremely powerful as it allows to increase significantly the fine (ensuring a deterrent effect) and at the same time to ensure that the criteria of proportionality is followed.

4. *Criteria used to determine the severity of the sanctions:* these are sometimes set by legislation as explained in (1) or developed through practice and case laws. Aggravating criteria can be the potential and/or actual harm to the environment or human health; the 'mental element' i.e. whether the offence has been committed with intent or gross negligence; the foreseeability of the offence i.e. whether the circumstances leading to the offence could reasonably haven foreseen; the lack of ccoperation of the offender e.g. with the inspection; the fact that the offence is repetitive or has last for a long duration of time; the potential benefits from the illegal behaviour whether in the form of profits made or avoided costs. Mitigating criteria often mirror the aggravating ones e.g. absence of imminent danger to the environment or human health; prompt cessation of the offence; cooperative behaviour of the offender; length of time elapsed since the offence. Concurrent obligations on the operator (i.e. the offence was committed in order to ensure that another obligation is fulfilled) are also considered as a mitigating factor.

   Two key elements in establishing the seriousness of the offence can be difficult to prove, namely the environmental impacts of the illegal conduct, and whether or not the illegal conduct was committed intentionally. Practitioners noted that proving and judging the intent can be a challenge. Proving the intent can be difficult for infringements of industrial emission legislation, as regulatory authorities often do not have sufficient evidence to judge the impacts or the level of intention. On the other hand, judging the intention is not always necessary, since there may already be a basis for bringing a case to court, e.g. in negligence.

5. *The publicity of the sanction:* The risk of adverse publicity is also viewed as an efficient dissuasive element or factor contributing to the effectiveness of the penalty. This relates not only to the decision on the actual fine or imprisonment but also on other administrative measures such as formal records of infringement or reports from inspection. It is acknowledged that such

publicity, in combination with administrative sanctions could be more effective than criminal proceedings. Data sharing between Member States in this area should be encouraged.

6. *Efficiency of measures and/or sanctions other than fines and imprisonment:* alongside fines and imprisonment penalties, all Member States provide for other types of measures and sanctions. In most cases, such measures/sanctions are the only ones available as part of the administrative proceedings. This is the case when there are no administrative financial penalties for breaches of legislation on industrial emissions, although administrative fines may exist for other environmental offences. Their role is often a remedial one as they aim to stop the unlawful behaviour or to remediate the damage caused to the environment. These are seen as very effective tools to ensure compliance. They are, as a rule, applied in a gradual way. They also can represent a heavy financial burden and have a strong deterrent effect e.g. the rehabilitation of the premises or the closure of the facility.

Finally, the detailed review of the enforcement system in the seven selected countries has shown the importance of the enforcement and sanctioning procedure, which can ultimately greatly influence the level of penalties, while the need for greening the judicial network and improving cooperation is widely recognised.

The different actors of the sanctioning procedure, the inspectors, the supervisory authorities, the prosecutors and the judges have to face a very technical matter. As some do not have special training, this may be an obstacle to an efficient enforcement of the legislation on industrial emissions. Lack of cooperation and information exchange is seen as a serious obstacle to enforcement. Different competent authorities may take the lead but there is a lack of information exchange between the different authorities. It is up to the authorities/the public prosecutor to develop the case and to go back to the inspectors if necessary. Where both the inspection and the enforcement body are combined in one organisation, it can provide a very effective partnership between inspectors (who often act as witnesses) and prosecutors who bring the case. Some stakeholders advocate the establishment of specialised legal structure, i.e. environmental courts and specialist prosecutors, along with environmental police and inspection. There is currently a tendency within Member States towards gradual specialisation.

Civil society, aside from initiating enforcement procedures through complaints, plays a significant role in enforcement through litigation. While some Member States are granting broader access to justice, others have a more limited approach. Several procedural aspects are central to effective access to justice allowing the public, including non-governmental organisations, to play their role as a watchdog to support enforcement. It is recommended that Member States ensure that legal standing for non-governmental organisations is not restricted, that it is possible to obtain interim relief and interim measures, and that the cost of the procedure should not be an obstacle to public access to justice. Good practices include effective mechanisms to ensure legal aid. Furthermore, recent decisions of the Court of Justice of the European Union should be taken into account when considering possible improvements in public access to justice. These relate to the requirement to ensure *locus standi* for non-governmental organisations and to avoid excessive costs of proceedings.

Overview of provisions on penalties related to legislation on industrial installations in the Member States

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1. Introduction

This report is one of the deliverables of the project 'Provisions on penalties related to legislation on industrial installations'. This project aims at providing the European Commission and the Member States with an overview of how the EU environmental requirements for industrial installations are being implemented and enforced in practice. In order to ensure operators of the installations covered by these directives comply with the EU requirements, it is crucial that the national transposing legislation provides adequate enforcement mechanisms, including penalties that are effective, proportionate and dissuasive.

Penalties are essential tools in the effective enforcement and implementation of EU environmental legislation. The adoption of penalties as an enforcement mechanism for ensuring that this legislation is complied with falls under the competence of the Member States. While all Member States provide for sanctions, generally both administrative and criminal, or, in some cases administrative or criminal, the way in which these are applied varies significantly between Member States, both in terms of the type and range of enforcement mechanism used. In addition, as there is no mandatory level of "minimum" or "maximum" fine to be imposed for non-compliance with a particular legislative provision, there will inevitably be variations between Member States in the different penalties provided for in the transposing legislation in respect of the four Directives in this study.

The effect of this discretionary application of penalties by Member States can be illustrated by comparing the different enforcement mechanisms which currently exist within the Member States.

The present report provides a broad comparative overview of administrative and criminal penalties set by national legislation in relation to infringements of the legislation transposing the four main directives on industrial installations, for all 27 Member States. It includes an analysis of the common sanctions used (e.g. administrative/criminal penalties), the maximum levels of such penalties, and any additional sanctions which may also be imposed either in addition to, or as an alternative to such penalties. This analysis constitutes the background information for a detailed review of the enforcement system and applicable sanctions in seven Member States. This detailed study will be focusing on the key factors/areas influencing the effectiveness of enforcement mechanisms. It will also be completed by case studies aiming at reviewing practical implementation and identifying good practices.

The summary draws on individual country reviews undertaken for each of the Member States. These are presented separately. Each country overview comprises two sections. The first section provides a general presentation of the sanctions in place. It includes a summary of the general framework for administrative and criminal penalties, including the relevant legislation, the types of sanctions (e.g., administrative/criminal) and general information on enforcement. It also indicates whether liability applies to natural and legal persons. The second section considers in detail the offences, types and levels of penalties applicable for an infringement of the main obligations set by each of the Directives covered by the study.

2. The Project Background and Methodology

The project covers the four main Directives regulating emissions from industrial installations:

- Directive 2008/1/EC concerning integrated pollution prevention and control (IPPC Directive);[1]
- Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants (LCP Directive);[2]
- Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvent in certain activities and installations (VOC Directive).[3]
- Directive 2000/76/EC on the incineration of waste (WI Directive);[4]

Not all the provisions of each Directive are relevant to this study. Only provisions which place an obligation on the operator are relevant, as they are enforceable and, as such, their infringement should be identified as an offence and corresponding penalties should be set by the transposing national legislation. However, the number of such obligations is quite large and it was considered necessary to streamline the analysis. Therefore, all relevant provisions have been grouped under four key obligations to focus the comparison across countries. The detailed obligations set by the EU legislation on industrial emissions and the four key obligations identified for the sake of the study are detailed in the present section.

2.1. Relevant provisions of the legislation on industrial emissions

The IPPC Directive (2008/1/EC) provides the framework for the other legislation on industrial emissions control. Its objective is to achieve integrated prevention and control of pollution from a wide range of industrial activities covered in Annex I to the Directive. The IPPC Directive applies to around 52,000 industrial installations in the European Union. It covers a wide range of industrial installations such as energy industries, production and processing of metals, mineral industries, chemical industries, and waste management installations.

Under the IPPC Directive no new industrial and agricultural activities with a high pollution potential listed in Annex I of this directive shall be operated without an environmental permit from the authorities in the respective Member State. The permits are to include measures ensuring that certain environmental conditions are met (e.g. preventive measures are taken against pollution, no significant pollution is caused, waste production is avoided). The table below summarises the main enforceable articles of the IPPC directive.

[1] Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version). *Official Journal L 024, 29/01/2008 P. 0008 – 0029.*

[2] Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants. *Official Journal L 309, 27/11/2001 P. 0001 – 0021.*

[3] Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations. *Official Journal L 085, 29/03/1999 P. 0001 – 0022.*

[4] Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste. *Official Journal L 332 , 28/12/2000 P. 0091 – 0111.*

Table 1: IPPC Directive 2008/1/EC

Article	Key enforceable provisions
Article 4	No new installation shall be operated without a permit in accordance with the Directive
Article 5	Existing installations shall have permits in accordance with the Directive by 30 October 2007
Article 6	Applications for permits shall contain specific information listed in Article 6 (description of the installation and its activities, the raw and auxiliary materials, other substances and the energy used in or generated by the installation…)
Article 12 (1)	Operators shall inform the competent authorities of any planned change in the operation.
Article 12(2)	Operators shall request a permit when they are planning substantial changes in their installation
Article 14(a)	Operators shall comply with the conditions of a permit when operating the installation
Article 14(b)	Operators shall regularly inform the competent authority of the results of monitoring of releases
Article 14(c)	Operators shall afford the competent authority all necessary assistance with inspections

The Directives on VOC, LCP and WI emissions regulate the emissions of pollutants from certain industrial activities through the setting of limit values of pollutants and monitoring requirements. Pursuant to Article 19(2) of the IPPC Directive, the emission limit values set by these sectoral directives shall be applied as minimum emission limit values.

The 1999 VOC Directive covers emissions of organic solvents from stationary commercial and industrial sources. Industrial operators of plants using volatile organic solvents listed in Annex I must comply with specific emissions limits by installing equipment to reduce emissions or by introducing a reduction scheme to arrive at an equivalent emission level by replacing conventional products which are high in solvent with low-solvent or solvent free products. The main enforceable articles are:

Table 2: VOC Directive 1999/13/EC

Article	Key enforceable provisions
Article 3(2)	All new installations not covered by Directive 96/61/EC are registered or undergo authorisation before being put into operation
Article 4	Where an installation undergoes a substantial change, or comes within the scope of the Directive for the first time following a substantial change, that part of the installation shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.
Article 5(2)(a) and (b)	Installations shall comply with the emission limit values[…] and other requirements laid down in Annex IIA; or the requirements of the reduction scheme specified in Annex IIB.
Article 5(4)	For installations not using the reduction scheme, any abatement equipment installed after 1999 shall meet all the requirements of Annex IIA.
Article 5(5)	Options for installations where two or more activities are carried out, each of which exceeds Annex IIA thresholds, e.g., each activity must meet specified requirements individually[…]
Article 5(6)	Substances or mixtures classified as CMR because of VOCs content shall be replaced, as far as possible[…]by less harmful substances or mixtures within the shortest possible time.
Article 5(8)	Certain discharges of halogenated VOCs assigned risk phrase R40 where the mass

Article	Key enforceable provisions
Article 3(2)	All new installations not covered by Directive 96/61/EC are registered or undergo authorisation before being put into operation
Article 4	Where an installation undergoes a substantial change, or comes within the scope of the Directive for the first time following a substantial change, that part of the installation shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.
	flow is ≥ 100 g/h shall comply with emission limit value of 20 mg/Nm3.
Article 5(9)	Discharges of VOCs classified as CMR or assigned risk phrases R40, R45, R46, R49, R60, R61 or R68 after Directive enters into force have to comply with the para. 7 & 8 ELVs within shortest possible time.
Article 5(10)	All appropriate precautions to be taken to minimise emissions during start-up & shut down.
Article 8(1)	Operators shall supply the competent authority once a year or on request with data to enable competent authority to verify compliance with this Directive;
Article 9(1)	Operators have to demonstrate compliance to the satisfaction of the CA with: — ELVs in waste gases, fugitive emission values & total ELVs, — the requirements of the reduction scheme under Annex IIB. Solvent management plans according to Annex III can demonstrate compliance. Gas volumes added to waste gas for cooling or dilution purposes shall not be considered when determining mass concentration of the pollutant in the waste gas.
Article 10 (a)	The operator shall inform the competent authority and take measures to ensure that compliance is restored within the shortest possible time

The LCP Directive applies to combustion plants with a rated thermal input equal to or greater than 50 MW, irrespective of the type of fuel used (solid, liquid or gaseous). Its aim is to limit the amount of sulphur dioxide, nitrogen oxides and dust emitted from large combustion plants. The table below summarizes the main enforceable articles of the LCP Directive.

Table 3: LCP Directive 2001/80/EC

Article	Key enforceable provisions
Article 4(1)	Operators of plants…put into operation before November 2003 shall comply with the ELVs laid down in Part A of Annexes III to VII in respect of SO_2, NOx & dust, as set in their license.
Article 4(2)	Operators of new plants [put into operation after November 2003] shall comply with ELVs laid down in part B of Annexes III to VII in respect of SO_2, NOx & dust, as set in their license.
Article 4(4)	In case they benefit from an exemption from compliance with the emission limit values and from their inclusion in the national emission reduction plan pursuant to this provision, operators are required to submit each year to the competent authority a record of the used and unused time allowed for the plants' remaining operational life.
Article 5	Plants of rated thermal input ≥ 400 MW which do not operate more than 2 000 hours per year until December 2015 & 1 500 hours from January 2016 shall be subject to limit value for SO_2 emissions of 800 mg/Nm3.
Article 7(1)	In case of breakdown the operator must reduce or close down operations if a return to normal operation is not achieved within 24 hours, or operate the plant using low polluting fuels. In any case the CA shall be notified within 48 hours. Cumulative duration of unabated operation in any 12-month period shall not exceed 120 hours.
Article 9	Waste gases shall be discharged in controlled fashion by means of a stack & in

Article	Key enforceable provisions
	accordance with the licence. The stack height must be calculated as to safeguard health and the environment.
Article 10	Where a combustion plant is extended by at least 50 MW, ELVs set in part B of the Annexes shall apply to the new part & fixed in relation to the thermal capacity of the entire plant[…]
Article 13	The operator shall inform the CA […] about results of continuous measurements, the checking of measuring equipment, & all individual & other measurements carried out to assess compliance.

The WI Directive applies to facilities intended for waste incineration and also to co-incineration plants (plants that use waste to produce energy). These facilities shall not operate without an authorisation. This Directive sets some limit values for the emissions of pollutants such a heavy metals, dioxins and furans, carbon monoxide, dust, total organic carbon, hydrogen fluoride, sulphur dioxide, nitrogen monoxide and nitrogen dioxide. The main enforceable articles of the WI directive are summarised below.

Table 4: Waste Incineration Directive 2000/76/EC

Article	Key enforceable provisions
Article 4(1)	No incineration or co-incineration plant shall operate without a permit.
Article 4(2)	Applications for permits shall contain a description of specific measures.
Article 4(8)	Where the operator of an incineration/co-incineration plant for non-hazardous waste envisages a change of operation which would involve incineration/co-incineration of hazardous waste, this shall be regarded as a substantial change pursuant to Article 2(10)(b) of Directive 96/61/EC and Article 12(2) of that Directive shall apply (namely that no substantial change shall be made without a permit)
Article 5(1)	The operator of the incineration or co-incineration plant shall take all necessary precautions concerning the delivery and reception of waste in order to prevent or to limit as far as practicable negative effects on the environment[…]as well as direct risks to human health.
Article 5(2), (3) & (4)	Conditions to be followed by the operator prior to accepting the waste at the incineration plant, including -- determining the mass of each category of waste, if possible according to the EWC; -- if hazardous waste, checking waste shipment documentation, taking samples, etc.
Article 6	Sets several requirements for operation of incineration and co-incineration plants.
Article 7	Requires incineration plants to be designed, equipped, built and operated in such a way that they comply with the air emission limit values set in this article.
Article 8 (1)	No waste water from the cleaning of exhaust gases discharged from an incineration or co-incineration plant can be discharged without a permit.
Article 8(4)	Where waste water from exhaust gases cleaning is treated collectively with other on-site sources of waste water, the operator must take measurements[…] to determine emission levels in the final waste water discharge attributed to that arising from exhaust gasses cleaning.
Article 8(5)	Specific requirements to apply when cleaning of exhaust gases containing Annex IV polluting substances are treated outside the incineration or co-incineration plant.
Article 8(7)	Incineration plant sites, including waste storage areas, shall be designed to prevent unauthorised & accidental release of pollutants into soil, surface & ground water, including storage capacity for contaminated run-off from rainwater, spillage or fire-fighting operations.
Article 9	Operators shall comply with the requirements in this article on residues resulting from the operation of the incineration or co-incineration plant.

Article	Key enforceable provisions
Article 10(1)	Measurement equipment shall be installed and techniques used to monitor the parameters, conditions and mass concentrations relevant to the incineration or co-incineration process.
Article 10(2)	Measurement requirements shall be laid down in the permit or in the conditions attached to the permit issued by the competent authority.
Article 11	Operators shall comply with the measurement requirements set in this article.
Article 12(2)	For incineration/co-incineration plants with a nominal capacity of two tonnes or more/hour and notwithstanding Article 15(2) of Directive 96/61/EC, an annual report to be provided to the competent authority on the functioning and monitoring of the plant shall be made available to the public.
Article 13 (2)	In case of breakdown, the operator shall reduce or close down operations as soon as practicable until normal operations can be restored.
Article 13(3)	Incineration plants shall under no circumstances continue to incinerate waste for > 4 hours uninterrupted where ELV are exceeded; cumulative duration of such conditions over one year shall be less than 60 hours.
Article 13(4)	Total dust content of emissions into air shall under no circumstances exceed 150 mg/m3 as a half-hourly average; moreover, all Article 6 conditions shall be complied with.

2.2. Identification of key enforceable obligations

In order to provide a clear and simple comparative framework, all relevant provisions of the four directives covered by the study have been grouped under four key obligations:

Four key obligations

- ***Obligation 1:*** to apply for a permit for existing and new installations
- ***Obligation 2:*** to supply information for application for permits
- ***Obligation 3***: to notify the competent authority of any changes in the operation of an installation
- ***Obligation 4:*** to comply with the conditions set in the permit or mandatory ELVs

Table 2.2.1 next page summarises how each of these key obligations link to the relevant provisions of the IPPC, VOC, LCP and WI Directives, as per the tables in Section 2.1.

Table 5: Overview of key enforceable obligations

	IPPC Directive (2008/1/EC)	VOC Directive (1999/13/EC)	LCP Directive (2001/80/EC)	WI Directive (2000/76/EC)
Obligation 1	Obligation to apply for a permit for new or existing installations Art 4, Art 5, Art 12(2)	Obligation to apply for an authorisation/registration for new or existing installations Art 3(2), Art 4	Not relevant for LCP Directive (covered under IPPC Directive)	Obligation to apply for a permit for new or existing installations including for waste water Art 4(1), Art 4(8)
Obligation 2	Obligation to supply information for application for permits Art 6	Not relevant for VOC Directive (covered under the IPPC Directive only for relevant plants falling under the IPPC Directive)	Not relevant for LCP Directive (covered under IPPC Directive)	Obligation to supply information for application for permits Art 4(2)
Obligation 3	Obligation to notify the competent authority of any changes in the operation of an installation Art 12(1), Art 14(b)* * For the part setting a requirement to notify the CA in case of incident or accident significantly affecting the environment	Not relevant for VOC Directive (covered under the IPPC Directive only for relevant plants falling under the IPPC Directive)	Obligation to notify the competent authority of any changes in the operation of an installation Art 7(1)	Obligation to notify the competent authority of any changes in the operation of an installation
Obligation 4	Obligation to comply with the conditions set in the permit or mandatory ELV's Art 14(a) - (c)	Obligation to comply with: Conditions set in the authorisation/registration or mandatory ELV's; Art 9(1) Appropriate measures via conditions of authorisation/general binding rules including *ELVs/**FEV's/the Reduction Scheme in Annex IIB; Art 5(2)–(4), Art 5(8)-(10) Monitoring requirements; Art 8(1) and A duty to notify the competent authority of non-compliance with the Directive Art 10(a)	Obligation to comply with the conditions set in the permit or mandatory ELV's Art 4(1), (2) and (4), Art 5, Art 7(1), Art 9, Art 10, Art 13	Obligation to comply with the conditions set in the permit or mandatory conditions including ELV's Art 5(1)-(4), Art 6, Art 7, Art 8(1), Art 8(4), Art 8(5), Art 8(7), Art 9, Art 10(1)-(2), Art 11, Art 12(2), Art 13(2)-(4)

There are a few cases when the key enforceable obligations are not specifically mentioned as such in all the four directives, as follows:

- Obligations 1 and 2 to apply for a permit for existing and new installations and to supply information for application for permits are not specifically reflected in the LCP Directive. However, all LCP installations are covered by the IPPC Directive and need to operate with an IPPC permit. Therefore, as a rule, infringements to these obligations are covered by the relevant infringements to the IPPC Directive and related sanctions.

- Obligations 2 and 3 to supply information for application for permits and to notify the competent authority of any changes in the operation of an installation are not relevant in the case of the VOC Directive. Only some of the plants covered by the VOC Directive fall under the scope of the IPPC Directive. For these plants, as a rule, infringements to these obligations are covered by the relevant infringements to the IPPC Directive and related sanctions.

- With regard to the WI Directive, Obligation 3 is shaded as the Directive defines what is to be considered an essential change in relation to waste incineration plants, but does not set up an obligation to notify the CA of changes in the operation of the installation.

3. Comparative Analysis

The review of individual Member States' sanctions for infringement to industrial emissions legislation shows many differences between national frameworks and enforcement mechanisms, including the use of administrative versus criminal sanctions, and the types and level of penalties imposed.

With regards to the imposition of administrative or criminal penalties, previous studies[5] indicated that while in some countries, administrative sanctions are considered to have the same repressive and preventive character as criminal ones, in certain regimes there is a substantial distinction between administrative and criminal sanctions: for the latter, there is no social blame in the administrative sanction; rather, the only intention is to re-establish the public order. The body imposing the sanction and the proceedings to impose the sanction in many countries will be a clear tool to differentiate between both measures. In most cases the administration or administrative body will be responsible for imposing administrative measures whereas a criminal court will be in charge of imposing criminal measures. The proceedings to impose the sanctions are also different. Except in common law countries where there is not a specific and differentiate procedure to impose administrative sanctions an administrative sanction will be imposed through an administrative procedure whereas the criminal sanction will be imposed through a criminal procedure.

The tables on the next pages provide an overview of the situation in each Member State, based on country studies, while these differences and variations across Member States are further described in this section.

[5] See for instance Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member States, Milieu , 2003 http://ec.europa.eu/environment/legal/crime/pdf/ms_summary_report.pdf

Table 6: Operation of an installation without the required environmental permit

Member State	Administrative Penalties (Maximum amount/sentence)	Additional/other administrative sanctions	Criminal Penalties (Maximum amount/sentence)	Additional/other Criminal sanctions
Austria	Euros 72,600, 6 weeks	Closure of installation, seizure of tools, machines and equipment	Euros 1,800,000, 5 years	N/A
Belgium				
Flanders:	Euros 50,000	Suspension/revocation of permit Ban/restriction of activity	Euros 250,000, 2 years	Dissolution, ban/ restriction of activity, closure (legal)
Wallonia:	Euros 100,000	Ban/restriction of activity	Euros 10,000,000 15 years	Dissolution, ban/ restriction of activity, closure (legal)
Brussels Capital:	Euros 62,500		Euros 50,000, 12 months	Dissolution, ban/ restriction of activity, closure (legal)
Bulgaria	Euros 3,068 (natural) Euros 10,226 (legal)	Termination of activity	Euros 2,557 (natural) Euros 1,534, 3 years (officials)	N/A
Cyprus	N/A	Cancellation of licence/restriction of terms	Euros 34,172, 2 years	Ban/restriction of activity
Czech Rep.	Euros 405,872	Ban/restriction of activity	None	N/A
Denmark	None	Ban/restriction of activity	Euros 6,000, 2 years	Seizure of the net profit (legal)
Estonia*	Euros 1,200 (natural) Euros 32,000 (legal)	N/A	Euros 16,000 (legal[6])	N/A
Finland	N/A	Rectification, corrective measures	Variable fine[7], 6 years (natural) Euros 850,000 (legal)	Rectification, corrective measures
France	N/A	Ban/restriction of activity/closure	Euros 75,000, 1 year (natural) Euros 375,000 (legal)	Ban/restriction of activity, closure (legal)
Germany*	Euros 50,000	N/A	Euros 10,800,000[8], 3 years (natural) Euros 1,000,000 (legal)	N/A
Greece	Euros 500,000	Ban/restriction of activity	Euros 15,000, 2 years	N/A
Hungary*	182 – 365/ day	Ban/restriction of activity	Euros 547, 8 years (natural)	Ban/restriction of activity, dissolution, variable fine (legal)
Ireland	N/A	Ban/restriction of activity	Euros 15,000,000, 10 years	Ban/restriction of activity

[6] For natural persons, fine is proportional to income
[7] Proportional to income
[8] Hypothetical amount (unlikely in practice). The judge determines the amount of one daily unit taking into account the economic background of the convict. The maximum amount of one daily unit is 30,000 Euros/Unit, and the maximum number of daily units is 360 daily units.

Member State	**Administrative Penalties** (Maximum amount/sentence)	Additional/other administrative sanctions	**Criminal Penalties** (Maximum amount/sentence)	Additional/other Criminal sanctions
Italy	Euros 35,000	Ban/restriction of activity, revocation of permit, closure	Euros 50,000 2 years (natural[9])	Ban/restriction of activity
Latvia	Euros 711 (natural) Euros 4,269 (legal)	N/A	None	N/A
Lithuania	Euros 2,320 (natural persons/ officials)	N/A	None	N/A
Luxembourg	N/A	Ban/restriction of activity/closure	Euros 125,000, 6 months (natural) Euros 750,000 (legal)	Ban/restriction of activity(legal), closure (natural)
Malta	N/A	N/A	Euros 4,660, 2 years	Confiscation, payment for enforcement/restitution
The Netherlands	Variable fine	Withdrawal of permit, restoration damages	Euros 76,000, 6 years	N/A
Poland	Variable fine	Ban/restriction of activity	Euros 1,250, 30 days	Restriction of movement and obligation to carry out public works
Portugal	Euros 37,500 (natural) Euros 2,500,000 (legal)	Ban/restriction of activity, closure, confiscation	Liability for pollution: 8 years fine, 3 years imprisonment	N/A
Romania	Euros 23,182	Ban/restriction of activity	Continuing activity after suspension of permit: Euros 23,182, 3 years	N/A
Slovakia*	Euros 331,939	N/A	Ban on operations and/or 10 years (natural) Euros 1,660,000 (legal)	N/A
Slovenia	Euros 4,100 (natural) Euros 125,000 (legal)	Ban/restriction of activity, corrective measures, monitoring	None	N/A
Spain	Euros 2,000,000	Ban/restriction of activity/ closure	N/A	N/A
Sweden	Euros 111,394	Ban/restriction of activity	A fine[10], 2 years	N/A
UK	N/A	Ban/restriction of activity	Euros 59,772, 5 years	N/A

* Applies Quasi-Criminal fines/penalties for less serious offences (either in addition to or as an alternative to criminal ones)

[9] Includes corporate individuals
[10] Proportional to income

Table 7: Obligation to supply information for application for permits

Member State	Administrative Penalties (Maximum amount/sentence)	Additional/other administrative sanctions	Criminal Penalties (Maximum amount/sentence)	Additional/other criminal sanctions
Austria	None	Permit will not be granted	N/A	N/A
Belgium				
Flanders:	Euros 50,000	Permit will not be granted None	Euros 250,000, 2 years	Dissolution, ban/ restriction of activity, closure (legal)
Wallonia:	None	None	None	Dissolution, ban/ restriction of activity, closure (legal)
Brussels Capital:	None		None	Dissolution, ban/ restriction of activity, closure (legal)
Bulgaria	Euros 3,068 (natural) Euros 10,226 (legal)	Termination of activity Revocation of permit	Euros 2,557 (natural) Euros 1,534, 3 years (legal)	N/A
Cyprus	N/A	Cancellation of licence/restriction of terms	Euros 34,172, 2 years	Ban/restriction of activity
Czech Rep.	Euros 40,656	Ban/restriction of activity	None	N/A
Denmark	None	Permit will not be granted	N/A	Seizure of the net profit
Estonia*	None	Permit will not be granted	For false information: Euros 16,000 (legal) 1 year (natural)	Permit will not be granted
Finland	N/A	Rectification, corrective measures	Variable fine, 6 years (natural) Euros 850,000 (legal)	Rectification, corrective measures
France	None	N/A	None	N/A
Germany*	None	None	None	N/A
Greece	Euros 500,000	Ban/restriction of activity	Euros 15,000, 2 years	
Hungary*	N/A	N/A	N/A	N/A
Ireland	N/A	N/A	Euros 15,000,000, 10 years	Ban/restriction of activity
Italy	Euros 35,000	Ban/restriction of activity, revoke permit	Euros 51,646, 3 years (natural)	Ban/restriction of activity
Latvia	N/A	N/A	N/A	N/A
Lithuania	Euros 2,320 (natural persons/officials)	N/A	N/A	N/A
Luxembourg	None	None	None	N/A
Malta	N/A	N/A	Euros 4,660, 2 years	Confiscation, payment for enforcement/restitution
The Netherlands	Variable fine	Revoke permit, restoration damages	N/A	N/A
Poland	N/A	N/A	N/A	N/A
Portugal	N/A	N/A	N/A	N/A
Romania	Euros 23,182	Ban/restriction of activity	N/A	N/A

Member State	**Administrative Penalties** (Maximum amount/sentence)	Additional/other administrative sanctions	**Criminal Penalties** (Maximum amount/sentence)	Additional/other criminal sanctions
Slovakia*	Euros 331,939	N/A	Ban on operations and/or 10 years (natural) Euros 1,660,000 (legal)	N/A
Slovenia	None	None	N/A	N/A
Spain	Euros 300,506	Ban/restriction of activity/ closure	N/A	N/A
Sweden	Euros 111,394	Ban/restriction of activity	A fine, 2 years	N/A
UK	N/A	Ban/restriction of activity	Euros 59,772, 5 years	N/A

* Applies Quasi-Criminal fines/penalties for less serious offences (either in addition to or as an alternative to criminal ones)

Table 8: Failure to notify competent authority of any changes in the operation of an installation

Member State	Administrative Penalties (Maximum amount/sentence)	Additional/other administrative sanctions	Criminal Penalties (Maximum amount/sentence)	Additional/other criminal sanctions
Austria	Euros 72,600, 4 months	Withdrawal of licence, Closure of installation, seizure of tools, machines and equipment	Euros 1,800,000, 5 years	N/A
Belgium				
Flanders:	Euros 50,000	Suspension/revocation of permit Ban/restriction of activity	Euros 250,000, 2 years	Dissolution, ban/ restriction of activity, closure (legal)
Wallonia:	Euros 100,000	Ban/restriction of activity	Euros 10,000,000 15 years	Dissolution, ban/ restriction of activity, closure (legal)
Brussels Capital:	Euros 62,500		Euros 50,000, 12 months	Dissolution, ban/ restriction of activity, closure (legal)
Bulgaria	Euros 51,125	Termination of activity	Intentional pollution of the soil, air or waters: Euros 2,557 (natural) Euros 1,534, 3 years (officials)	N/A
Cyprus	N/A	Cancellation of licence/restriction of terms	Euros 34,172, 2 years	Ban/restriction of activity
Czech Rep.	Euros 40,656	Ban/restriction of activity	N/A	N/A
Denmark	None	Ban/restriction of activity	N/A	N/A
Estonia*	Euros 400 (natural) Euros 2,000 (legal)	N/A	None	N/A
Finland	N/A	Rectification, corrective measures	Variable fine, 6 years (natural) Euros 850,000 (legal)	Rectification, corrective measures
France	N/A	Ban/restriction of activity/closure, rectification	Euros 1,500 (natural) Euros 7,500 (legal)	N/A
Germany*	Euros 5,000	N/A	N/A	N/A
Greece	Euros 500,000	Ban/restriction of activity	Euros 15,000, 2 years	N/A
Hungary*	N/A	N/A	N/A	N/A
Ireland	N/A	Ban/restriction of activity, revoke permit	Euros 15,000,000, 10 years	Ban/restriction of activity
Italy	Euros 35,000	Ban/restriction of activity, revoke permit	N/A	Ban/restriction of activity
Latvia	N/A	N/A	N/A	N/A
Lithuania	Euros 2,320	N/A	None	N/A

Member State	**Administrative Penalties** (Maximum amount/sentence)	Additional/other administrative sanctions	**Criminal Penalties** (Maximum amount/sentence)	Additional/other criminal sanctions
Luxembourg	N/A	Ban/restriction of activity/closure	Euros 125,000, 6 months (natural) Euros 750,000 (legal)	Ban/restriction of activity (legal)
Malta	N/A	N/A	Euros 11,600, 2 years	Confiscation, payment for enforcement/restitution
The Netherlands	Variable fine	Revoke permit, restoration damages	Euros 76,000, 6 years	N/A
Poland	N/A	N/A	N/A	N/A
Portugal	Euros 20,000 (natural) Euros 48,000(legal)	Ban/restriction of activity, closure, confiscation	Liability for pollution: 8 years fine, 3 years imprisonment	N/A
Romania	Euros 23,182	Ban/restriction of activity/Suspension of permit	Continuing activity after suspension of permit: Euros 23,182 fine, 3 years	N/A
Slovakia*	Euros 331,939	N/A	Ban on operations and/or 10 years (natural) Euros 1,660,000 (legal)	N/A
Slovenia	Euros 50,000 (natural) Euros 75,000 (legal)	Ban/restriction of activity, corrective measures, monitoring	None	N/A
Spain	Euros 20,000	N/A	None	N/A
Sweden	Euros 111,394	Ban/restriction of activity	A fine, 2 years	N/A
UK	N/A	Ban/restriction of activity	Euros 59,772, 5 years	N/A

*Applies Quasi-Criminal fines/penalties for less serious offences (either in addition to or as an alternative to criminal ones)

Table 9: Failure to comply with the permit/licence conditions or mandatory ELVs

Member State	**Administrative Penalties** (Maximum amount/sentence)	Additional/other administrative sanctions	**Criminal Penalties** (Maximum amount/sentence)	Additional/other criminal sanctions
Austria	Euros 72,600, 6 weeks	Withdrawal of licence, Closure of installation, seizure of tools, machines and equipment	Euros 1,800,000, 5 years	N/A
Belgium				
Flanders:	Euros 50,000	Suspension/revocation of permit Ban/restriction of activity	Euros 250,000, 2 years	Dissolution, ban/ restriction of activity, closure (legal)
Wallonia:	Euros 100,000	Ban/restriction of activity	Euros 10,000,000 15 years	Dissolution, ban/ restriction of activity, closure (legal)
Brussels Capital:	Euros 62,500		Euros 25,000, 12 months	Dissolution, ban/ restriction of activity, closure (legal)
Bulgaria	Euros 51,125	Termination of activity	Euros 2,557 (natural) Euros 1,534, 3 years (legal)	N/A
Cyprus	N/A	Cancellation of licence/restriction of terms	Euros 34,172, 2 years	Ban/restriction of activity
Czech Rep.	Euros 2, 025, 234	Ban/restriction of activity	None	N/A
Denmark	None	Ban/restriction of activity	Euros 6,000, 2 years (natural)	Seizure of the net profit (legal)
Estonia*	Euros 1,200, 30 days detention (natural) Euros 32,000 (legal)	N/A	Euros 16,000 (legal) 5 years (natural)	N/A
Finland	N/A	Rectification, corrective measures	Variable, 6 years (natural) Euros 850,000 (legal)	Rectification, corrective measures
France	N/A	Ban/restriction of activity/closure, rectification	Euros 75,000, 1 year (natural) Euros 375,000 (legal)	Ban/restriction of activity, closure (legal)
Germany*	Euros 50,000	N/A	Euros 10,800,000, 3 years (natural) Euros 1,000,000 (legal)	N/A
Greece	Euros 500,000	Ban/restriction of activity	Euros 15,000, 2 years	N/A
Hungary*	Euros 1,826	Ban/restriction of activity, revoke permit	Euros 547, 8 years (natural)	Ban/restriction of activity, dissolution, variable fine (legal)
Ireland	N/A	Ban/restriction of activity, revoke permit	Euros 15,000,000, 10 years	Ban/restriction of activity
Italy	Euros 35,000	Ban/restriction of activity, revoke permit	Euros 50,000, 2 years (natural)	Ban/restriction of activity
Latvia	Euros 711 (natural) Euros 2,134 (legal)	N/A	None	N/A

Member State	**Administrative Penalties** (Maximum amount/sentence)	Additional/other administrative sanctions	**Criminal Penalties** (Maximum amount/sentence)	Additional/other criminal sanctions
Lithuania	Euros 2,320 (natural persons/officials)	N/A	Euros 7,530, 6 years (natural) Euros 376,530 (legal)	Community work, restriction of movement (natural)
Luxembourg	N/A	Ban/restriction of activity/closure	Euros 125,000, 6 months (natural) Euros 750,000 (legal)	Ban/restriction of activity, dissolution (legal)
Malta	N/A	N/A	Euros 11,600, 2 years	Confiscation, payment for enforcement/restitution
The Netherlands	Variable fine	Revoke permit, restoration damages	Euros 76,000, 6 years	N/A
Poland	Variable fine	Ban/restriction of activity	Euros 1,250, 30 days	Restriction of movement and obligation to carry out public works
Portugal	Euros 48,000 (natural) Euros 2,500,000 (legal)	Ban/restriction of activity, closure, confiscation	Liability for pollution: 8 years fine, 3 years imprisonment	N/A
Romania	Euros 23,182	Ban/restriction of activity/Suspension of permit	Continuing activity after suspension of permit: Euros 23,182, 3 years	N/A
Slovakia*	Euros 331,939	N/A	Ban on operations and/or 10 years (natural) Euros 1,660,000 (legal)	N/A
Slovenia	Euros 225,000 (natural) Euros 375,000 (legal)	Ban/restriction of activity, corrective measures	None	N/A
Spain	Euros 2,000,000	Ban/restriction of activity/ closure	None	N/A
Sweden	Euros 111,394	Ban/restriction of activity	A fine, 2 years	N/A
UK	N/A	Ban/restriction of activity	Euros 59,772, 5 years	N/A

* Applies Quasi-Criminal fines/penalties for less serious offences (either in addition to or as an alternative to criminal ones)

3.1. General remarks

Administrative versus criminal sanctions

Not all Member States have specific provisions for both administrative and criminal sanctions relating to industrial installations. Unlike the continental legal systems which exist in most EU countries, several common law countries, or countries with a common law influence, including Ireland, Cyprus and Malta have no administrative sanctions in place for offences. Until recently, the UK had no specific provision for administrative sanctions. However, new legislation was introduced in 2010 allowing administrative sanctions to be applied to a limited number of environmental offences[11]. These sanctions are known as "Civil sanctions" and can be used against a business committing certain environmental offences, as an alternative to prosecution and criminal penalties of fines and imprisonment. Currently however, civil sanctions do not extend to those breaches of legislation in respect of industrial installations. These sanctioning powers are expected to extend to industrial installations from April 2011.

In some countries, there is no specific criminal sanction for the particular offences covered by the study. However, in most of these cases, general criminal sanctions are provided for by a criminal code or framework environmental law and as a rule, would apply. In such instances, the sanction is often conditional upon the existence of damage to the environment (Czech Republic, Latvia, Lithuania, Slovenia and Spain). Where specific criminal sanctions are set for particular offences, general criminal sanctions as described above also apply.

Whether criminal and administrative sanction regimes can apply simultaneously varies between Member States. In Denmark, Greece, Hungary, The Netherlands, Poland, Portugal, Romania, the Czech Republic and Sweden, both administrative and criminal sanctions may be applied simultaneously. However, in a number of countries including Austria, Belgium, Germany, Slovakia, and Spain, administrative and criminal sanctions cannot be applied simultaneously. Spain and Germany are typical examples of countries where the imposition of a criminal penalty excludes the possibility of imposition of an administrative sanction, by operation of the rule "non bis in idem". In Belgium, if the public prosecutor considers that the infringement to the environmental legislation is a criminal offence and triggers a criminal procedure, the administrative is suspended.

Federal States

For three Member States (Austria, Germany and Spain) the legislative competence to regulate installations is split between the Federal level and the State/Regional level. In Germany, the main rules and sanctions are set up at the federal level, but may also in certain cases be further regulated at the State level. This is the case for infringements of obligations set by the federal Water Management Act concerning the unlawful discharge of waste water from the cleaning of exhaust gases. While sanctions are established by the federal Water Management Act, sanctions are also set by the relevant laws of the States although not all States lay down sanctions, some relying only on the sanctions set u at the Federal level.

In Spain, sanctions establish at the Federal level constitute a minimum level of penalties. Autonomous communities may set more stringent penalties for infringement of the corresponding obligations set by the regional legislation. Article 149(1)(23) of the Constitution of 1978 provides that the State has exclusive competence on matters related to the protection of the environment without prejudice to

[11] The Environmental Civil Sanctions (England) Order 2010 and the Environmental Sanctions (Miscellaneous Amendments) (England) Regulations 2010

powers of the Autonomous Communities (Comunidades Autonomas) to take additional protective measures. In other words, the Autonomous Communities can provide more stringent and detailed environmental measures than the environmental legislation issued by the State which is regarded as a minima legislation. With regard to environment, the Autonomous Communities pursuant to Article 148(1)(9) of the Constitution of 1978 are competent in the management of environmental matters. This provision implies that the Autonomous Communities are competent for the inspection and enforcement of environmental legislation and that they have sanctioning power. For instance the Law 16/2002 on classified installations states that the offences encompassed in its Article 31 shall be without prejudice to the ones that can be established by the Autonomous authorities.

Several Autonomous Communities (e.g. Cataluña, Andalucía, Cantabria, Pais Vasco) but not all of them (e.g. Asturias, Madrid Community) have established their own sanctioning regime for the infringement of environmental legislation. Related to classified installations, almost all of them refer to the same offences that the ones listed in Law 16/2002 on classified installations (e.g. the operation of an activity without the integrated environmental permit, or failure to comply with the conditions set in the integrated environmental permits). However the sanctions sometimes differ from the ones set in Law 16/2002. For instance the failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people can lead to a fine of Euros 3 million in Cantabria, Euros 2.4 million in Andalucía, Euros 2.5 million in Aragon, while under Law 16/2002 the same offence can lead to a fine of Euros 2 million.

On the other hand, while Belgium is a federal system, sanctions in respect of industrial emissions regulations are set at the regional level but within the framework of the Federal legislation, in particular the Criminal Code.

Competent Authorities

In most Member States, regulatory and enforcement competences are divided between a number of different "competent authorities". In several Member States, including Austria, Germany, Belgium and Bulgaria, this involves the division of regulatory functions between authorities at the national/federal level and at regional/state levels. In other countries, such as Denmark and Hungary, the regional authorities exercise the major control functions over industrial installations. In The Czech Republic, The Netherlands, UK and Ireland, regulatory functions are also carried out at the municipal/local authority level.

3.2. Administrative sanctions

In most Member States, administrative sanctions are established through a combination of sectoral legislation (e.g. legislation relating to air, waste management, and water, which transposes the requirements for each of the four Directives) as well as a single administrative code or "framework" act.

For example, in Bulgaria, the sanctions relating to industrial installations are primarily transposed by the following: the Environmental Protection Act (EPA) (SG 91/2002) (providing the general framework on environmental offences and corresponding sanctions); Ordinance SG 69/2003, (stipulating the sanctions and procedures for imposing sanctions in cases of harm/pollution of the environment above the limit values); the Clean Ambient Air Act (CAAA) (SG 45/1996) (determining sanctions in cases of breach of the air quality legislation); and the Waste Management Act (WMA) (SG 86/2003) – which lays down the penalties for breaching the requirements of waste management legislation, including for operating the installations for incineration and co-incineration of waste.

A number of Member States including Bulgaria, Cyprus, Estonia, Greece, Hungary, Portugal, Slovakia and Slovenia do not provide specific administrative sanctions for all four obligations. Instead they apply more general administrative sanctions for environmental damage. This is the case in Greece, where Article 30 of Law 1650/1986 provides for administrative sanctions in the form of a fine for any natural or legal persons that cause pollution or other degradation of the environment or who violates the provisions of the relevant legislation, independently of civil or penal responsibility.

Administrative sanctions are in most cases pecuniary sanctions (i.e. fines). However, in some countries, other measures can be applied in case of infringement of the legislation relating to industrial installations (see below).

Level of fines

In most Member States the legislation provides a range of fines which may be imposed, depending, amongst other things, on the severity of the offence and its effect on the environment. Other Member States provide specific categories of offences and corresponding levels of fines. Spain is a typical example, where offences are divided into "petty offences" "serious offences" and "very serious offences", with different levels of penalties applicable to each category of offence.

The levels and ranges of fines for administrative offences vary widely between Member States. The highest fines for administrative offences are to be found in Portugal, where a breach of the first obligation (namely the operation of an installation without a required permit, table 3.1) is punishable with a fine of up to Euros 2,500,000 for legal persons. In Czech Republic, the maximum fine for a breach of the fourth obligation (namely non-compliance with the permit/licence conditions or mandatory ELVs, table 3.4) is Euros 2,025,234. In Spain, the highest fines are imposed for breaches of the first and the fourth obligations. A breach of either obligation can result in a fine of up to Euros 2,000,000, (or even higher in the case of several Autonomous Communities). In Greece, a breach of any of the four obligations can result in a fine of up to Euros 500,000. By comparison, in Latvia the maximum fine for a breach of the fourth obligation is Euros 711 for natural persons and Euros 2,134 for legal persons.

Additional/other administrative measures

In a few Member States, such as Slovakia, a fine is the primary sanction available to regulatory authorities, while in others a "toolkit" of different enforcement measures is available to the competent authority. Additional sanctions include:

- restriction, suspension or prohibition/ban of the activity
- cancellation of the licence or restriction of its terms;
- seizure of tools, machinery and equipment;
- imposition of rectification or corrective measures on the operator;
- closure.

It is worth noting that, in Portugal, the legislation provides a comprehensive list of 'Accessory sanctions' which may also be imposed for serious and very serious environmental offences (in addition to those sanctions mentioned above). These include:

- Suspension of the right to obtain subsidies or other benefits issued by national or European public authorities or services;
- Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities, or to participate in public auctions or tenders which have as their object the contract or award of public works;

- Loss of tax benefits, credit benefits and credit financing acquired prior to the offence;
- Making public the sentence;

Some of these additional sanctions are very stringent and have a very powerful deterrent effect, and could be seen as more effective than a fine regardless of its level. It should be noted that while in most countries closure is seen as a coercive measure, primarily intended to stop the damage to the environment, it is applied as a sanction in a number of countries including Austria, France, Luxembourg, Portugal and Spain.

Natural/legal persons

Most Member States provide administrative sanctions for both natural and legal persons. An exception to this is Lithuania, where administrative sanctions may be imposed on natural persons (citizens) but not legal persons. Instead, administrative liability can be imposed on "officials" of legal entities, which may include managers and heads of municipal institutions.

A number of Member States set different levels of administrative fines for natural/legal persons. More specifically, in Bulgaria, Estonia, Latvia, Portugal and Slovenia, legal liability is generally higher for legal persons than for natural persons. In Slovenia, different levels of fines are set for breaches of each of the obligations in respect of the following three categories: i) legal entities, ii) independent individuals/entrepreneurs and iii) responsible persons of those legal entities or individuals/entrepreneurs.

Coverage and level of sanctions for the different obligations considered by the study

Of the four obligations considered in this study, breaches of Obligation 1 (operation of an installation without a required permit, table 3.1) and Obligation 4 (namely non-compliance with the permit/licence conditions or mandatory ELVs, table 3.4) are generally the most sanctionable under administrative law, and carry the highest administrative penalties among the 27 Member States. In Bulgaria, Czech Republic, Hungary, and Portugal the fines are highest in respect of Obligation 4. In all other Member States the maximum levels of fines between these two obligations are the same.

The enforcement policy is usually less stringent for breaches of Obligation 3 (failure to notify the competent authority of changes in the operation of an installation, table 3.3). Of those Member States which impose administrative sanctions for non compliance, several do not impose administrative sanctions in respect of Obligation 3, namely Hungary, Latvia, and Poland. In a number of other Member States, e.g. Czech Republic, Estonia, Germany, Portugal and Spain, sanctions are lower in respect of Obligation 3, as compared with Obligations 1 and 4. In Bulgaria on the contrary, the maximum fines for Obligations 3 and 4 are the same (approximately Euros 51,125).

Obligation 2 (to supply information for permit applications, table 3.2) is the least enforceable among Member States, with a number of countries not imposing any administrative sanctions for non-compliance, e.g. Austria, Belgium (Wallonia and Brussels regions), Estonia, Germany, Hungary, Latvia, Poland, Portugal, and Slovenia. In most cases a failure to supply the required information does not constitute an offence but merely results in the permit not being granted.

Quasi-criminal sanctions

Only two Member States, Hungary and Slovakia, set quasi-criminal sanctions in addition to administrative and criminal sanctions. Such sanctions are respectively known as 'Misdemeanours' (Hungary) or 'Petty offences' (Slovakia) and are generally used for less serious offences. Quasi-

criminal sanctions carry similar penalties to criminal sanctions (see below). However, they involve a simplified procedure, and at first instance are handled by the administrative authorities rather than by the judicial system. In Hungary, only natural persons may be subject to such proceedings, while in Slovakia both legal and natural persons may be liable.

In three countries (Austria, Germany and Estonia), quasi-criminal sanctions are used instead of administrative sanctions. In Austria and Germany, such quasi-criminal sanctions are known as "administrative criminal" and are established as an alternative method of enforcement, sitting alongside criminal sanctions and administrative enforcement measures. The use of such sanctions is conditional upon the offender's negligence or intent. In Austria and Germany the aim of such sanctions is not to restore legality or to prevent danger but to have deterrent and preventive effects by imposing convictions on the perpetrator for a wrongdoing. In Estonia, such quasi-criminal offences are known as "misdemeanours", and are stipulated in the Penal Code and other laws, including sectoral legislation.

3.3. Criminal sanctions

The majority of Member States have provisions for criminal sanctions for breaches of legislation relating to industrial installations. Of those Member States, the majority of criminal sanctions are set up through a combination of sectoral legislation transposing the requirements for each of the four Directives and a single criminal code or act which establishes sanctions for breaches of that sectoral legislation e.g. Austria, Bulgaria, Germany, Denmark, Finland, Hungary, Latvia, Lithuania, and Czech Republic. In other countries, such as Estonia and Poland, environmental crimes are also set out in the relevant sectoral legislation such as waste, water, air and nature protection.

A number of Member States including Bulgaria, Cyprus, Hungary, Portugal, Slovakia and Slovenia do not have specific criminal sanctions for all four obligations. Instead they apply more general criminal sanctions for environmental damage. In Bulgaria, Article 352 of the Criminal Code makes it a crime to pollute air, water or soil, which renders it dangerous for humans, animals, and plants or makes it unfit for use for cultural, health, agricultural and other economic purposes. Such a crime is punishable with imprisonment of up to 5 years and a fine of up to Euros 2,557, with liability resting with the individual who has committed the crime. In cases of negligence, the punishment is probation or a fine of between Euros 51 and Euros 153. In minor cases the sanction is a fine up to Euros 153, imposed by administrative order.

In Portugal, there are no specific criminal offences for any of the obligations covered by this study. Instead, the Portuguese Penal Code includes a number of different categories of environmental crimes including Articles 279 and 280 of the Code, which provide for criminal liability including liability for air pollution from industrial installations. In case of fault, Article 279 establishes a penalty of 3 years maximum imprisonment and a fine of 600 days which, in accordance with Article 280, can be increased to 8 years whenever such pollution represents a danger to life, physical integrity or assets of others as well as to high value historical or cultural monuments.

By way of contrast, in Greece, breaches of the four obligations are punishable by a combination of specific and more general criminal sanctions. Article 28 of Law on Environment Protection (Law 1650/1986) provides for criminal sanctions including fines and imprisonment, for pollution or carrying out an activity/enterprise without a necessary permit, including imprisonment of between three months and two years. A failure to comply with permit conditions pursuant to Article 4 may also result in imprisonment for a period of 3 months to 2 years, or a fine or both, because of environmental pollution. However, in addition to the aforementioned offences, Greece also provides general criminal sanctions for environmental damage. Article 28(1) of Law 1650/1986 sets up offences for a) causing

pollution or degrading the environment with an action or omission that infringes the provisions of that law or published decrees and ministerial or prefectoral decisions adopted pursuant to that law or b) carrying out an activity or enterprise without the required authorisation or approval or exceeding the limits of authorisation or approval and degrading the environment.

Level of fines

Of those Member States which impose criminal sanctions, the primary penalties include imprisonment and a fine. However, there are wide variations between the maximum levels of sanctions which may be imposed. A clear illustration of this disparity can be seen by comparing the maximum levels of fines between Poland and Austria. In Poland, a breach of obligation 1 (operation of an installation with the required permit, Table 3.1) and obligation 4 (to comply with the permit/licence conditions or mandatory ELV's, Table 3.4), is punishable with a maximum penalty of Euros 1,250 and 30 days imprisonment, while in Austria the maximum penalty for breaching the same obligations is Euros 1,800,000 and 5 years respectively. Furthermore, Austria applies the same penalty for a breach of obligation 3 (to notify the competent authority of any changes to the operation of an installation, Table 3.3), while Poland does not apply any penalty.

In most Member States the levels of liability and sentencing will vary depending on the severity of the offence, for example where there is a danger to human life, and in some cases where the assets of others are endangered (e.g. Portugal). Fines may also be proportional to the benefits accrued due to non- compliance with the law (e.g. Finland). Generally, national legislation provides for more severe penalties where the offence has been intentionally or negligently committed. In some Member States, the levels of criminal sanctions are categorised according to severity, e.g. Denmark, Ireland, UK and Poland have two levels of offence, one for basic and one for more serious offences. Other member States have heavier sanctions for repeat offences (e.g. Malta), or aggravated circumstances (e.g. Finland and Austria)

As an illustration, in Austria, there are five different categories of environmental offence, for which the penalties vary depending on the level of severity of the pollution and its effect, or potential effect on the environment, as well as on the context of the pollution (e.g. disposal of waste):

Offences	**Penalties**
In non-compliance with a regulatory provision or act, operation of an installation, in which dangerous operations are carried out that have the **general potential to cause long-term deteriorations in water, soil or air quality or substantial risks to animal and plants species** (or have other impacts enumerated in the law), §§ 181d, 181e of the Criminal Code	• ***Intentional commission:*** a maximum of **2 years** imprisonment or a maximum fine of **360 daily units**[12] • ***plus aggravated circumstances:*** a maximum imprisonment of **3 years** or a maximum fine of **360 daily units** • ***Gross negligent commission:*** a maximum of **6 months** imprisonment or a maximum fine of **360 daily units** • ***plus aggravated circumstances:*** an imprisonment of maximum of **1 year** or a maximum fine of **360 daily units**

[12] Taking into account the personal guilt of the perpetrator of a criminal offence, the court decides about the number of daily units which the perpetrator is punished with. The level of payment in relation to one daily unit depends on various circumstances, e.g. the income of the perpetrator. One daily unit is a minimum amount of 4 Euros and maximum amount of 5000 Euros (§ 19(2) of the Criminal Code).

In non-compliance with a regulatory provision or act, impairments of the environment that have the **general potential to cause long-term deteriorations in water, soil or air quality or substantial risks to animal and plants species** (or have other impacts enumerated in the law), §§ 180, 181 Criminal Code:	• ***Intentional commission:*** a maximum of **3 years** imprisonment • ***plus aggravated circumstances:*** a minimum of **6 months** imprisonment and a maximum of **5 years** imprisonment • ***negligent commission:*** a maximum of **1 year** imprisonment or a maximum fine of **360 daily units** • ***plus aggravated circumstances:*** a maximum of **2 years** imprisonment or a maximum fine of **360 daily units**
In non-compliance with a regulatory provision or **act, treatment, storage and disposal of waste that has the general potential to cause long-term deteriorations in water, soil or air quality or substantial risks to animal and plants species** (or have other impacts enumerated in the law), §§ 181b, 181c Criminal Code	• ***Intentional commission***: a maximum of **2 years** imprisonment or a maximum fine of **360 daily units** • ***plus aggravated circumstances:*** a maximum imprisonment of **3 years** • ***negligent commission:*** a maximum of **6 months** imprisonment or a maximum fine of **360 daily units** • ***plus aggravated circumstances:*** an imprisonment of maximum of **1 year** or a maximum fine of **360 daily units**
• In non-compliance with a regulatory provision or act, **endangering of flora and fauna,** §§ 182, 183 of the Criminal Code	• ***Intentional commission:*** a maximum of **2 years** imprisonment or a maximum fine of **360 daily units** • ***negligent commission:*** a maximum of **6 months** imprisonment or a maximum fine of **360 daily units**
• In non-compliance with a regulatory provision or act **serious impairment by noise**, § 181a of the Criminal Code	• ***Intentional commission:*** imprisonment of **maximum 6 months** or a maximum fine of **360 daily units**

Additional/other criminal measures

Other criminal penalties applicable to legal persons include:

- restriction, suspension or prohibition/ban of the activity (e.g. Belgium (Brussels Capital), Cyprus, France, Hungary, Ireland, Italy, Luxembourg, UK);
- seizure of the net profits (e.g. Denmark),
- imposition of rectification or corrective measures on the operator (e.g. Finland, Malta);
- Dissolution of the legal entity (e.g. Belgium (Brussels Capital), Hungary)
- closure of the installation (e.g. France, Luxembourg and Belgium (Brussels Capital), France, Italy, Luxembourg, Portugal)

Natural/legal persons

Most Member States provide criminal sanctions for both natural and legal persons. Exceptions to this include Italy and Bulgaria, where criminal sanctions may be imposed on natural persons but not on legal persons. In Italy, criminal liability may be imposed on "officials" of legal entities. This may include managers and individuals who have made the relevant decisions on behalf of the corporate entity. In Bulgaria, criminal liability for intentional pollution of the soil, air or waters, rests with the individual who commited the crime, (pursuant to Article 352 of the Criminal Code). Alternatively, where an official allows exploitation of a power plant without the necessary treatment facilities, or does not fulfill their obligation to ensure continuous and proper operation of the facility, he or she will be liable (pursuant to Article 353).

Most Member States set different levels of criminal fines according to whether the perpetrator is a natural or legal person. In such cases, legal liability is generally higher for legal persons than for natural persons, e.g. in Estonia and Finland, natural persons are subject to a variable fine according to their level of income, while legal persons are subject to a specific maximum fine. In Germany, limits for natural persons are set according to maximum fines per daily unit and a maximum number of daily units. The judge determines the amount of one daily unit, taking into account such factors as the guilt and the economic background of the perpetrator.

Coverage and level of sanctions for the different obligations considered by the study

Of the 27 Member States, only 10 apply criminal penalties in respect of all four obligations, namely Belgium (Flanders), Bulgaria, Cyprus, Finland, Greece, Ireland, Malta, Slovakia, Sweden and the UK. All of those countries except Malta impose one maximum level of sanctions across all four obligations. In Malta, the highest sanctions are imposed for breach of obligations 3 and 4, with a fine of Euros 11,600 and 2 years of imprisonment.

The highest criminal penalty of all the Member States is found in Ireland, where the maximum penalty for all four obligations is Euros 15,000,000 and 15 years imprisonment. In Belgium (Wallonia), the maximum fine is Euros 10,000,000 and 15 years imprisonment.

In Austria and Germany, the level of payment is calculated on a daily unit basis. In Austria, one daily unit is a minimum of Euros 4 and a maximum of Euros 5,000, up to a maximum number of 360 daily units. This means that a breach of obligation 1 (operation of an installation with the required permit), obligation 3 (to notify the competent authority of any changes to the operation of an installation) and obligation 4 (to comly with the permit/licence conditions or mandatory ELV's), are punishable by a potential maximum fine of Euros 1,800,000 and imprisonment of up to 5 years. In Germany, the maximum fine may be even higher, since a perpetrator may be fined up to Euros 30,000 /Unit, and up to a maximum number of 360 daily units. This equates to a potential amount of Euros 10,800,000, for the most serious environmental crimes. When imposing a fine in either Austria or Germany, the judge determines the allocated amount for one daily unit and the number of daily units by taking into account a number of factors, including the level of guilt and the economic background of the perpetrator.

For the following Member States, only Obligation 1 (operation of an installation with the required permit) and Obligation 4 (to comply with the permit/licence conditions or mandatory ELVs) are sanctionable: Denmark, Germany, Hungary and Poland. Each of these applies the same level of penalty across those obligations.

As is the case for administrative sanctions, Obligation 2 (to supply information for permit applications) is the least enforceable among Member States, with a number of countries imposing no sanctions for non-compliance. Of those countries that impose criminal sanctions for breaches of environmental legislation, the following do not impose sanctions for this obligation: Austria, Belgium (Wallonia and Brussels), France, Germany, Hungary, Luxembourg and Lithuania, The Netherlands, Poland, Portugal and Romania. Two notable exceptions are Estonia and Italy, both of which impose sanctions for Obligation 1, 2 and 4. Estonia imposes sanctions for providing false information when applying for a permit, including a maximum of Euros 16,000 for legal persons and up to 1 year imprisonment for natural persons. Italy imposes its highest penalties for breaches of Obligation 2: A fine of Euros 51,646 and a maximum sentence of 3 years imprisonment for natural persons.

Annexes - Country Overviews

Table of content

Annex I - Austria

AUSTRIA

1. Overview of penalties related to legislation on industrial installations

The Austrian legislation transposing Directives 2008/1/EC, 2001/80/EC, 2000/76/EC and 1999/13/EC on industrial installations provides for administrative criminal sanctions, administrative enforcement measures and criminal sanctions. Administrative criminal sanctions and administrative enforcement measures are regulated in each act transposing the Directives and criminal sanctions are regulated in the Criminal Code of Austria.

It is worth noticing that, in Austria, the legislative competence to regulate installations is split between the Federation and the states. On the federal level, the Trade, Commerce and Industry Regulation Act (GewO), the Waste Management Act (AWG), the Emission Protection Act for Boiler Plants (EG-K) and the Mineral Resource Act (MinroG) have been adopted. The states are competent in relation to IPPC installations that do not fall under the federal legislation, e.g. installations, where agricultural activities are carried out, installations for intensive rearing of animals or certain electricity producing plants. In detail, it is sometimes difficult to identify the applicable law that covers a specific installation. The following presentation provides a rough overview.

The administrative criminal sanctions for infringements of obligations transposing Directive 2008/1/EC are mainly regulated in the Trade, Commerce and Industry Regulation Act (§§ 77a, 81a-c, 353ff, Annex 3 Gewerbeordnung), but also in the Waste Management Act 2002 (Abfallwirtschaftsgesetz), the Emission Protection Act for Boiler Plants (Emmissionsschutzgesetz für Kesselanlagen) and the Mineral Resource Act (Mineralrohstoffgesetz). Additionally, except for Tyrol, where installations for the intensive rearing of animals are forbidden,[13] all Bundesländer of Austria adopted IPPC-laws mainly to transpose the obligations with regard to agricultural activities and electricity producing large combustion plants.

The Volatile Organic Compounds-Plants-Ordinance (VOC-Anlagen-Verordnung) and the federal Ordinance on Solvents (Lösungsmittelverordnung 2005) transposing Directive 1999/13/EC respectively Directive 2004/42/EC are based on the Trade, Commerce and Industry Regulation Act and do only apply to installations requiring a permit or having already received a permit under the Trade, Commerce and Industry Regulation Act. They do not provide for an independent permit procedure.

The Emission Protection Act for Boiler Plants (Emissionsschutzgesetz für Kesselanlagen), which repealed the Clean Air Quality Law for Boiler Plants (Luftreinhaltegesetz für Kesselanlagen), transposes Directive 2001/80/EC. The Emission Protection Law for Boiler Plants provides for an independent permit procedure for boiler plants and determines sanctions in case of infringements of its requirements.

[13] As the IPPC Directive refers also to slaughterhouses, treatment and processing of milk, installations for the disposal or recycling of animal carcases and animal waste exceeding a certain capacity and such plants may be subject to the legislation of the Länder Tyrol seems not to be in compliance with the Directive. Additionally, if a large combustion plant is producing electricity with a capacity over 50 MW the Bundesländer are competent for the legislation of the details of the permit procedure.

Directive 2000/76/EC was transposed by the federal Ordinance on Waste Incineration (Abfallverbrennungsverordnung), which is based on the Waste Management Act, the Trade, Commerce and Industry Regulation Act, the Emission Protection Act for Boiler Plants and the Water Management Act (Wasserrechtsgesetz), as well as the federal Ordinance on the Limitation of Waste Water Emission of the Cleaning of Incineration Gas (AEV Verbrennungsgas) that is based on the Water Management Act. The Waste Management Act provides for an independent permit procedure and determines its own sanctions.

Administrative criminal sanctions are classified as such because they are conditional upon the offender's negligence or intent and they do not aim to restore legality and to prevent danger but to have deterrent and preventive effects and to convict the perpetrator for a wrongdoing. Infringements of most of the enforceable provisions transposing the four Directives are subject to administrative criminal sanctions. These infringements entail fines or in exceptional cases imprisonment. The transposing legislation sets forth the minimum and maximum limits of fines, in the range of which the competent administrative authority shall identify the proportionate fine, taking into account the severity of the infringement. In accordance with the Administrative Penalties Act (VStG) the admissible minimum duration of imprisonment is 12 hours, imprisonment of more than two weeks is only permitted in exceptional circumstances and imprisonment longer than six weeks is prohibited. In addition to these sanctions the competent authority can also confiscate machines and tools (e.g. § 369 GewO). In accordance with the Administrative Penalties Act the competent authorities responsible for prosecution of administrative criminal sanctions are at first instance the district administrative authorities of the Bundesländer (states) while appeals can be lodged to the independent administrative tribunals of the states. According to § 5(1) of this Act intentional and negligent violations of penal administrative offences are sanctioned, unless the specific legislation regulates this differently. Since none of the legislation transposing the four Directives regulates this differently, the sanctions for infringements of the transposing legislation apply to intentional and negligent violations. Finally, the district administrative authority can withdraw the operator` s licence to pursue commercial and industrial activities, and thereby prevent him from operating an installation. The authority shall withdraw this licence, if the operator violates provisions linked to commercial and industrial activities, e.g. provisions linked to the operation of industrial installations (§ 87(1) no.3 GewO in conjunction with § 361 GewO).

In accordance with the Administrative Penalties Code (§ 9) authorised representatives of legal persons and registered partnerships are responsible for the compliance of these bodies with regulatory provisions. Legal persons and registered partnerships are liable for fines imposed on authorised representatives for the perpetrations of administrative criminal offences and any other financial impacts incurred by this perpetration.

National legislation transposing these Directives additionally provides for a number of (preliminary) enforcement measures that facilitate the competent authorities to restore legality in case of an infringement of administrative provisions. For example the GewO and the AWG entitle the competent authority to close parts of or complete installation, if requests for acting legally within the stated time period are not complied with, if the operator runs the installation without a permit; or to ban dangers to life and health of human beings or property (§ 360 (1) and (3) GewO and § 62(2) AWG); additionally, tools, machines and transport equipment can be seized (§ 360(2) GewO).

Environmental criminal law is regulated in sections 177b and 177c and 180 – 183 of the Criminal Code.[14] It does not refer to the legislation transposing the Directives and does not sanction the infringement of a regulatory provision per se, but only in combination with additional conditions.

[14] In the course of amendments to the criminal law new environmental criminal offences were introduced in 2006.

However, § 181d of the Criminal Code contains a provision dealing with the unlawful operation of an installation in general and applies to all installations falling under the scope of the legislation transposing the four Directives. Additionally, the unlawful operation of an installation can meet the conditions of all other criminally sanctioned offences. Sanctions for violating environmental criminal provisions are imprisonment and fines.

Two general characteristics of the criminal offences are noteworthy. Firstly, environmental criminal law does not require that the environment is polluted or actually at risk of being polluted; a general potential risk for the environment suffices. Secondly, the Austrian environmental criminal law (with the exemption of §§ 182f Criminal Code) is subject to the principle of administrative accessoriness. In light of this principle, an environmental criminal offence can only be committed if the perpetrator infringes a regulatory provision; and the commission of an environmental criminal offence is justified if the perpetrator complies with the administrative act authorising a polluting action, e.g. permits for installations. The only case when this principle does not apply is, when the administrative act, which authorises the polluting action, has been obtained by fraud or on the basis of incorrect information. The prosecution of a criminal offence and the subsequent court procedures are regulated in the Code of Criminal Procedure.

Taking into account the fact that the provisions of criminal environmental law do not sanction the infringement of a specific regulatory provision per se, these provisions can not be exclusively assigned to one of the obligations scrutinised in the tables below. For the purpose of a comprehensive presentation they are described below instead of being repetitively included in each row of each table bearing in mind that in light of the principle of administrative accessoriness, the infringement of all regulatory provisions, including the obligations presented in the tables below, leads to criminal sanctions if the following conditions are met:

Criminal Offences	**Penalties**
In non-compliance with a regulatory provision or act, **operation of an installation,** in which dangerous operations are carried out that have the general potential to cause long-term deteriorations in water, soil or air quality or substantial risks to animal and plants species (or have other impacts enumerated in the law), §§ 181d, 181e of the Criminal Code	• Intentional commission: a maximum of 2 years imprisonment or a maximum fine of 360 daily units[15] • plus aggravated circumstances: a maximum imprisonment of 3 years or a maximum fine of 360 daily units • **Gross** negligent commission: a maximum of 6 months imprisonment or a maximum fine of 360 daily units • plus aggravated circumstances: an imprisonment of maximum of 1 year or a maximum fine of 360 daily units
In non-compliance with a regulatory provision or act, impairments of the environment that have the general potential to cause long-term deteriorations in water, soil or air quality or substantial risks to animal and plants species (or have other impacts enumerated in the law), §§ 180, 181 Criminal Code:	• Intentional commission: a maximum of 3 years imprisonment • plus aggravated circumstances: a minimum of 6 months imprisonment and a maximum of 5 years imprisonment • negligent commission: a maximum of 1 year imprisonment or a maximum fine of 360 daily units • plus aggravated circumstances: a maximum of 2 years imprisonment or a maximum fine of 360 daily units
In non-compliance with a regulatory provision or act, treatment, storage and disposal of waste that has the general potential to cause long-term deteriorations in water, soil or air quality or substantial risks to animal and plants species (or have other impacts enumerated in the law), §§ 181b, 181c Criminal Code	• Intentional commission: a maximum of 2 years imprisonment or a maximum fine of 360 daily units • plus aggravated circumstances: a maximum imprisonment of 3 years • negligent commission: a maximum of 6 months imprisonment or a maximum fine of 360 daily units • plus aggravated circumstances: an imprisonment of maximum of 1

[15] Taking into account the personal guilt of the perpetrator of a criminal offence, the court decides about the number of daily units which the perpetrator is punished with. The level of payment in relation to one daily unit depends on various circumstances, e.g. the income of the perpetrator. One daily unit is a minimum amount of 4 Euros and maximum amount of 5000 Euros (§ 19(2) of the Criminal Code).

	year or a maximum fine of 360 daily units
• In non-compliance with a regulatory provision or act, endangering of flora and fauna, §§ 182, 183 of the Criminal Code	• Intentional commission: a maximum of 2 years imprisonment or a maximum fine of 360 daily units • negligent commission: a maximum of 6 months imprisonment or a maximum fine of 360 daily units
• In non-compliance with a regulatory provision or act serious impairment by noise, § 181a of the Criminal Code	• Intentional commission: imprisonment of maximum 6 months or a maximum fine of 360 daily units

With the entry into force of the Association Liability Law (Verbandsverantwortlichkeitsgesetz – VbVG) as of 1 January 2006, criminal liability in the context of criminal law of autonomous corporations is possible in Austria for the first time. From this time onward associations can be made liable for all offences (including environmental offences, in as far as this is provided in special laws). Legal persons (including public corporations, with the exception when those are involved in the execution of the law), partnerships, registered acquisition enterprises and European Economic Interest Groupings are to be subsumed under the term "Association". They can be held criminally liable like private individuals, with the difference that only a fine can be imposed on them. The following section summarises important issues in relation to the liability of associations:

- The prerequisite is the perpetration of an offence by a natural person who presides over the association as a decision-maker (as an executive with representation rights, exercising supervisory powers in a managerial position or otherwise as the result of substantial influence on the management) or who has employment status with the association and carries out work for the association (employee).

- The offences committed by such persons must (i) be to the advantage of the association or (ii) constitute a breach of duty, for the adherence of which the association is liable.

- Thus, an association is liable every time a decision-maker violates criminal law. The association is liable for offences committed by an employee if (i) the employee committed the offence and (ii) the perpetration of the offence was made possible or facilitated by technical, organisational or employment measures of the association. In general, the personal liability of the decision-maker and the employee does not eliminate the liability of the association.

- The fine is charged in daily rates (from 40 to 180) in the amount of the 360th part of the annual revenue (at least Euros 50 no more than Euros 10,000.00 a day).

- The liability of an association is even conceivable, if the damaged occurred due to an employee's omission to take due care.

Criminal environmental law has been subject to criticism in relation to the principle of administrative accessoriness. It is considered as ineffective that pollution of the environment is only sanctioned under the condition that administrative obligations have been infringed. Criminal sanctions preventing the environment from being polluted irrespective of the infringement of administrative obligations were requested.[16]

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Austria

[16] Criticism summarised by the NGO, oekobüro, available at:
http://www.oekobuero.at/start.asp?showmenu=yes&fr=&b=1408&ID=15365

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.
Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Austria
IPPC Directive	
Catch-all	C
4	X
5	X
6	-
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VoC Directive	
Catch-all	C
3(2)	C
4	C
5 (2)(a)	C
5 (2)(b)	C
5 (4)	C
5 (5)	C
5 (6)	C
5 (8)	C
5 (9)	C
5 (10)	C
8 (1)	C
9 (1)	C
10 (a)	C
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (4)	-
5	-
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	-
4 (1)	X
4 (2)	-
4 (8)	X

5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Austria. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

In addition some remarks should be made regarding the relationship between the pieces of Austrian legislation applicable in relation to sanctions for infringements of obligations set up by each of the four Directives.

In relation to the different pieces of legislation transposing Directive 2008/1/EC it must be noted that most of the installations in the meaning of Directive 2008/1/EC fall under the scope of the Trade, Commerce and Industry Regulation Act (GewO); they are listed in Annex 3 to the GewO. Some IPPC installations fall under the scope of the Waste Management Act (AWG), the Emission Protection Act for Boiler Plants (EG-K) or the Mineral Resource Act (MinroG) that are *leges speciales* in relation to these installations. The IPPC laws of the Bundesländer (states) complement the federal laws in relation to installations that carry out agricultural activities. The following bullet points in more detail describe

the relation between the Trade, Commerce and Industry Regulation Act and the three *leges speciales*.

- Waste treatment plants falling under the scope of the IPPC Directive are regulated in the Waste Management Act (AWG) and the Trade, Commerce and Industry Regulation Act (GewO). Since the Waste Management Act (AWG) is lex specialis in relation to these installations the Waste Management Act is primarily applicable. If waste treatment plants are exempted from the scope of the Waste management act, e.g. waste treatment plants that are part of an industrial or commercial installation in the meaning of the Trade, Commerce and Industry Regulation Act and exclusively recover waste that is produced in these installations (§ 37(2)no.3 AWG), the Trade, Commerce and Industry Regulation Act is applicable.[17]

- The Emission Protection Act for Boiler Plants (EG-K) applies to boiler plants and gas turbine plants. Many of them are large combustion plants in the meaning of Directive 2008/1/EC. The Emission Protection Act for Boiler Plants is lex specialis for these IPPC installations.

- Mining processing plants in the meaning of the IPPC Directive fall under the Mineral Resource Act (MinroG), if they are run in an operational context with prospecting for or extraction of mineral resources. Otherwise, they fall under the Trade, Commerce and Industry Regulation Act (GewO).

The Volatile Organic Compounds-Plants-Ordinance (VAV) transposing Directive 1999/13/EC sets requirements and emission limit values for installations that require permits under the Trade, Commerce and Industry Regulation Act (GewO).

The Emission Protection Act for Boiler Plants (EK-G) transposes Directive 2001/80/EC in relation to boiler plants and gas turbine plants. Installations in the meaning of this Directive that do not fall under the Emission Protection Act for Boiler Plants (EK-G) are covered by the provisions of the Trade, Commerce and Industry Regulation Act (GewO) or the Waste Management Act (AWG) or the respective IPPC laws of the states. For the sake of a comprehensive presentation the provisions of the Trade, Commerce and Industry Regulation Act, the Waste Management Act and the IPPC laws of the states are not presented in the table on Directive 2001/80/EC. They are included in the tables on Directive 2008/1/EC and Directive 2000/76/EC.

Transposing Directive 2000/76/EC the substantial requirements for waste-incineration and co-incineration installations are regulated in the Ordinance on Waste Incineration (AVV), which is based on the Waste Management Act (AWG), the Trade, Commerce and Industry Regulation Act (GewO) and the Emission Protection Act for Boiler Plants (EG-K). These three basic acts regulate the permit procedures for different installations that incinerate or co-incinerate waste, e.g. the Waste Management Act regulates the permit procedure for waste treatment plants that incinerate or co-incinerate waste. For the purpose of a comprehensive presentation the first three rows of the table on Directive 2000/76/EC only present the relevant provisions of the AWG. The corresponding provisions in relation to the Trade, Commerce and Industry Regulation Act (GewO) are presented in the table on Directive 2008/1/EC and the corresponding provisions of the Emission Protection Act for Boiler Plants (EK-G) are presented in the table on Directive 2001/80/EC.

As explained in the introduction the Austrian sanctioning system distinguishes between criminal and administrative criminal sanctions on the one hand and administrative enforcement measures on the other hand. Only the criminal and administrative criminal sanctions are presented in the following tables.

[17] With regard to the complex issue of the application of the AWG or the GewO in specific cases see also Holoubek/Potacs, Handbuch des öffentlichen Wirtschaftsrechts, 2002, p. 522 s.

Table 2.10 *Directive 2008/1/EC (IPCC Directive): types of offences and related administrative and criminal penalties in Austria*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Construction, operation of and substantial changes to IPPC-installations that fall under the scope of the GewO without permit, ***§§ 366(1) no.2, 74 of GewO***	Maximum fine of Euros 3.600	See introduction	See introduction
	Construction and operation of and substantial changes to waste treatment plants without permit, ***§§ 37, 79(1) no.9 AWG***	Fine of minimum Euros 3.630 to a maximum Euros 36.340		
	Construction and operation of and substantial changes to boiler plants and gas turbine plants without permit, ***§§ 26(1) no.4(a) and 5 EG-K***	Fine of a maximum of Euros 36 300		
	Construction and operation of and substantial changes to mineral processing plants without permit, ***§§ 121(1), 193 (1) MinroG***	Maximum fine of Euros 3.600 or, in case that the fine is not enforceable because of the poor financial situation of the perpetrator: maximum imprisonment of 6 weeks; in case of aggravated circumstances: fine between Euros 2.180 to 72.600		
	Construction, operation of and substantial changes to IPPC installation that carry out agricultural activities without permit as regulated in the IPPC laws of the states: ***§§ 4(1), 29(1) no.1 of the IPPC law of Burgenland***	Maximum fine of Euros 3.500		

	§§ 3(1), 10(1a), 10(2) of the IPPC law of Kärnten ***§§ 4(1), 9(1) no.2, 9(2) of the IPPC law of Niederösterreich*** ***§§ 25(1), 42(1) no.1 of the IPPC law of Oberösterreich*** ***§§ 3(1), 15(1) no.1 of the IPPC law of Salzburg*** ***§§ 3(1), 13(1) no.1 and 13(2) of the IPPC law of Steiermark*** ***§§ 4(1), 15(1a) and 15(2) of the IPPC law of Vorarlberg*** ***§§ 3(1), 13(1) no.1 of the IPPC law of Wien***	Maximum fine of Euros 10.000 Maximum fine of Euros 20.000 or maximum 6 week imprisonment Maximum fine of Euros 3.500 Maximum fine of Euros 35.000 Maximum fine of Euros 3.700 Maximum fine of Euros 20.000 Maximum fine of Euros 21.000 or maximum 4 weeks imprisonment, in case of repetition maximum fine of Euros 35.000 or maximum 6 weeks of imprisonment		
Obligation to supply information for application for permits	<u>Infringement or non-compliance with the following requirements:</u> Obligation to provide sufficient information, when applying for a permit to construct and operate waste treatment plants, ***§ 39 AWG*** Obligation to provide sufficient information, when applying for a permit to construct and operate boiler plants or gas turbine plants, ***§ 6 EG-K*** Obligation to provide sufficient information, when applying for a	The infringement of this obligation does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit.	N/A	N/A

	permit to construct and operate mineral processing plants, when applying for a permit, ***§ 121d MinroG*** Obligation to provide sufficient information, when applying for a permit to construct and operate IPPC installations that carry out agricultural activities as regulated in the IPPC laws of the states: ***§§ 4(2) of the IPPC law of Burgenland*** ***§ 3(2) of the IPPC law of Kärnten*** ***§ 5(1) of the IPPC law of Niederösterreich*** ***§ 26 of the IPPC law of Oberösterreich*** ***§ 3(1) of the IPPC law of Salzburg*** ***§ 3(3) of the IPPC law of Steiermark*** ***§ 4(2) of the IPPC law of Vorarlberg*** ***§ 4(1) of the IPPC law of Wien***			
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes to the operation of an IPPC installation falling under the scope of the GewO without notification, ***§§ 366(1) no.3 and § 81a(1) GewO*** Carrying out changes to boiler plants and gas turbine plants without notification, ***§§ 26(1) no. 4(b) EG-K***	Maximum fine of Euros 3.600 Fine of a maximum of Euros 36 300 Fine of minimum Euros 1.800 to a	See introduction	See introduction

		maximum Euros 7.270		
	Carrying out changes (non-substantial) to waste treatment plants without notification (relevant types of changes are enumerated in ***§ 37(4) AWG), §§ 79(2) no. 10, 37(4) AWG***	Fine of maximum Euros 2.180 or in case that the fine is not enforceable because of the poor financial situation of the perpetrator: maximum imprisonment of 4 months; in case of aggravated circumstances: fine between Euros 2.180 to 72.600		
	Carrying out changes to the operation of mineral processing plants without notification, ***§§ 193(2), 121a no.2 MinroG***	Maximum fine of Euros 3.500		
	Carrying out changes to IPPC installations that perform agricultural activities (as regulated in the IPPC laws of the states) without notification:	Maximum fine of 10.000 Euro		
	§§ 4(3), 29 (1) no.2 of the IPPC law of Burgenland	Maximum fine of Euros 20.000 or maximum 6 week imprisonment		
	§§ 3(4), 10(1a), 10(2) of the IPPC law of Kärnten	Maximum fine of Euros 3.500		
	§§ 4(2), 9(1) no.3, 9(2) of the IPPC law of Niederösterreich	Maximum fine of Euros 10.000		
	§§ 33(1), 42(1) no.2 of the IPPC law of Oberösterreich	Maximum fine of Euros 3.700		
	§§ 10(1), 15(2) no.1 of the IPPC law of Salzburg	No sanction		
	§§ 3(5), 13(1) no.2 and 13 (2) IPPC of the law of Steiermark	Maximum fine of Euros 7.000 or maximum 2 weeks imprisonment, in case of repetition maximum fine of		

	§ 4(4) IPPC of the law of Vorarlberg ***§§ 3(2), 13(2) no.1 of the IPPC law of Wien***	Euros 10.000 or maximum 4 weeks of imprisonment		
Obligation to comply with the conditions set in the permit or mandatory ELVs	<u>Infringement or non-compliance with the following requirements:</u> Obligation to comply with requirements set in the permit including emission limit values, ***§§ 367 no.25, 74-83 GewO*** Obligation to comply with requirements in the permit for waste treatment plants, ***§§ 43(4), 79(2) no.11 AWG*** Obligation to comply with ELVs or requirements set in the permit for boiler plants and gas turbine plants, ***§ 26(1) no.3(a) and (c) EG-KG*** Obligation to comply with requirements and ELVs set in the permit for mineral processing plants, ***§§ 121(4), 109(3), 193(1) MinroG*** Obligation to comply with requirements set in the permits for IPPC installation that carries out agricultural activities as stipulated in the laws of the states[18]: ***§§ 7, 29(1) no.3 and 4 of the IPPC Law of Burgenland***	Maximum fine of Euros 2.180 Fine of minimum Euros 1.800 to a maximum Euros 7.270 Fine of a maximum of Euros 7.260 Maximum fine of Euros 3.600 or, in case that the fine is not enforceable because of the poor financial situation of the perpetrator: maximum imprisonment of 6 weeks; in case of aggravated circumstances: fine between Euros 2.180 to 72.600 Maximum fine of Euros 3.500 Maximum fine of Euros 10.000	See introduction	See introduction

[18] Only infringements of the requirement to comply with the permit are presented.

	§§ 5, 10(1)(b) and (c), 10(2) of the IPPC law of Kärnten	Maximum fine of Euros 20.000 or maximum 6 week imprisonment		
	§§ 5(6), 9(1) no.4, 9(2) of the IPPC law of Niederösterreich	Maximum fine of Euros 3.500		
	§§ 25, 27, 42(1) no.4 of the IPPC law of Oberösterreich	Maximum fine of Euros 35.000		
	§§ 3 f, 15(1) no.3 of the IPPC law of Salzburg	Maximum fine of Euros 3.700		
	§§ 3f, 13(1) no.4 and 13(2) of the IPPC law of Steiermark:	Maximum fine of Euros 20.000		
	§§ 6, 15(1)(b) and (c) and 15(2) of the IPPC law of Vorarlberg	Maximum fine of Euros 21.000 or maximum 4 weeks imprisonment, in case of repetition maximum fine of Euros 35.000 or maximum 6 weeks of imprisonment		
	§§ 5; 13(1) no.2 of the IPPC law of Wien			

*ELVs: Emission Limit Values

Table 11.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Austria*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Construction and operation of installations that need a permit under the GewO and fall under the scope of the VAV without permit, ***§§ 366(1) no.2, 74 of the GewO***	Maximum fine of Euros 3,600	See introduction	See introduction
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes to the installation or operation without notification, ***§§ 366(1) no.2, 81f. of the GewO***	Maximum fine of Euros 3,600	See introduction	See introduction
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligations stipulated in the VAV, including compliance with emission limit values in waste gases, fugitive emission values and total emission values, ***§§ 367 no.25, 82(1) GewO in conjunction with the VAV***	Maximum fine of Euros 2,180	See introduction	See introduction

Table 2.12 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Austria*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Construction and operation of and substantial changes to boiler plants and gas turbine plants without a permit, ***§§ 26(1) no. 4(a) and (b) and 5 EG-K***	Maximum fine Euros 36,300	See introduction	See introduction
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to supply the required information, when applying for a permit, ***§ 6 EG-K***	The infringement of this obligation does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit.	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes to the boiler plants and gas turbine plants without notification, ***§§ 26(1) no.4(b) EG-K***	Maximum fine of Euros 36,300	See introduction	See introduction
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with emission limit values, ***§§ 26(1) no.3(a), § 3(4) etc. EG-K*** Obligation to comply with requirements in case of a malfunctioning or a breakdown and to notify the competent authority of the results of measurements, ***§ 26(1) no.1, 16(1) and (3) EG-K*** Catch-all provision, ***§ 26(1) no.3(f) EG-K***	Maximum fine of Euros 7,260 Maximum fine of Euros 726 Maximum fine of Euros 726	See introduction	See introduction

Table 2.13 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Austria*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Construction and operation of and substantial changes to waste treatment plants without permit, ***§§ 37, 79(1) no.9 AWG***	Minimum fine of Euros 3,630 and maximum fine of Euros 36,340	See introduction	See introduction
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to provide for detailed information on the type of waste that will be incinerated etc. is stipulated in ***§ 4 AVV***. This provision enumerates the information that the applicant is obliged to supply.	The infringement of this obligation does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit.	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out non-substantial changes to waste treatment plants without notification (relevant types of changes are enumerated in (§ 37(4) AWG), ***§§ 79(2) no. 10, 37(4) AWG***	Minimum fine of Euros 1.800 and maximum fine of Euros 7.270	See introduction	See introduction
Obligation to comply with the conditions set in the permits or mandatory ELVs[19]	Infringement or non-compliance with the following requirement: 1. Waste treatment plants (Annex II to AWG) that carry out waste incineration or co-incineration: Obligation to comply with the provisions of the AVV in relation to equipment, operation, including waste quality, classification of waste, measurement, monitoring, after-care and non-compliance with mandatory	Minimum fine of Euros 3.630 and maximum fine of Euros 36.340	See introduction	See introduction

[19] ELVs: Emission limit values.

	ELVs, ***§§ 79(1)no.18, 65(1)no.1 AWG***			
	Obligation to comply with requirements of the AVV on how to record emissions and procedure for their notification, ***§§ 79(3)no.1, 65(1)no.4 and 23(1)no.5 AWG***	Minimum fine of Euros 3.630 and maximum fine of Euros 36.340		
	Obligation to comply with requirements of the AVV on how to take samples to classify waste, ***§§ 79(3)no.5, § 23(3)no.1 AWG***	Minimum fine of Euros 3.630 and maximum fine of Euros 36.340		
	2. Industrial plants in the meaning of the GewO that carry out waste incineration or co-incineration:			
	Obligation to comply with requirements of the AVV, ***§§ 367 no.25, 82(1) GewO in conjunction with the AVV***	Maximum fine of Euros 2.180		
	3. Boiler plants and gas turbine plants in the meaning of the EK-G that carry out waste incineration or co-incineration):			
	Obligation to comply with requirements of the AVV, ***§ 26(1)no.3c EK-G in conjunction with the AVV***	Maximum fine of Euros 7.260		

Annex II – Belgium

BRUSSELS CAPITAL REGION

1. Environmental protection: a regional competence

Belgium is a Federal State composed of three communities (the Flemish Community, the French Community and the German-speaking Community) and three regions (the Walloon Region, Flanders and the Brussels Capital region).

Division of competences between the communities, the regions and the federal authority outlined in the special law on institutional reforms of 8 August 1980[20] is complex and still on-going.

The federal authority remains competent in several areas, such as national defence, justice, labour law, consumer protection and some aspects of public health (the remaining aspects having been transferred to the communities). Environmental protection is of regional competence. However, the federal authority is still competent for:

- Establishing product standards;
- Protection against radiation, including radioactive waste;
- Transit of waste; and
- Import, export and transit of non-indigenous species.

The Brussels Capital Region is thus competent to transpose Directive 2008/1/EC, Directive 1999/13/EC, Directive 2001/80/EC and Directive 2000/76/EC and enforce their requirements through the setting of sanction regimes and inspection bodies.

Even though the Regions are competent to set their own sanction regime, this has to be done in the framework of the Federal legislation, in particular the Criminal Code. This is important in relation to the applicability of sanctions to legal persons. The provisions related to the criminal liability of legal persons in Belgium are included in Article 7(bis) of the Federal Criminal Code. The criminal sanctions for legal persons (a fine, the confiscation of goods, the dissolution of the legal person, the prohibition to exercise an activity, the closure of the activity, the publication or dissemination of the decision) are thus harmonised in the three regions.

Another specificity of the Belgian criminal system, which applies across the three regions, is that criminal fines shall be multiplied by 5.5 according to the legal coefficient fixed on the current monetary value (*système des décimes additionnels*).[21]

2. Overview of penalties related to legislation on industrial installations

Directive 2008/1/EC was transposed by Ordinance of 5 June 1997 on environmental permits that sets the criminal offences and their related sanctions. The administrative offences to the requirement of this Ordinance and their related sanctions are set under Ordinance of 25 March 1999 related to the research, investigation, detection, prosecution and punishment of offences related to the environment[22] (Ordinance on environmental offences).

Directive 1999/13/EC, Directive 2001/80/EC and Directive 2000/76/EC were transposed by governmental Orders in the (BCR).[23] These Orders do not set any sanctions. The activities that fall

[20] Loi spéciale de réformes institutionnelles du 8 août 1980 (M.B. du 15/08/1980, p. 9434)
[21] Loi du 5 mars 1952 relative aux décimes additionnels sur les amendes pénales.
[22] Ordonnance du 25 mars 1999 relative à la recherche, la constatation, la poursuite et la répression des infractions en matière d'environnement.
[23] Directive 1999/13/EC was transposed by several Order of the Government of the Brussels Capital Region. Directive 2001/80/EC was transposed by Order of the Government of the Brussels Capital Region related to the emission of certain pollutants in the atmosphere from large combustion plants *(Arrêté du gouvernement de la Région de Bruxelles-Capitale*

under these Orders shall be granted an environmental permit under the Ordinance on environmental permits and the requirements set by the sectoral Orders mentioned above are considered as conditions to be fulfilled in environmental permits. The non-compliance with the conditions set in the environmental permits are qualified criminal and administrative offences respectively under the Ordinance on environmental permits (see Article 96(1)(1)) and the Ordinance of 25 March 1999 related to the research, investigation, detection, prosecution and punishment of offences relating to the environment (See Article 33(5)).

Administrative or criminal sanctions apply in case of infringement of environmental legislation in the BCR. However if the public prosecutor considers that the infringement to the environmental legislation is a criminal offence and initiate a criminal procedure the administrative one shall be suspended.

The Ordinance on environmental offences gathers all the administrative sanctions related to the infringement of the environmental legislation of the Brussels Region (maximum fine of Euros 62,500).

Each specific sectoral environmental legislation such as for instance the Ordinance of 7 March 1991 related to the prevention and management of waste[24] or the Ordinance of 5 June 1997 on environmental permits[25] transposing the IPPC Directive sets criminal sanctions for infringement of their requirements (e.g. penalties of imprisonment up to one year and a fin up to Euros 25,000 to operate an installation without a permit). The Ordinance on environmental offences also sets specific criminal sanctions that judges can take when dealing with infringements of environmental legislation (e.g. the partial or total closure of an installation).

The authority in charge of enforcing environmental legislation in the Brussels Region is the Environmental Inspectorate of the Brussels Environmental Agency.[26] The Ordinance on environmental offences empowers the inspectors of this Agency to issue warning and injunctions where necessary.[27]

3. Review of offences and sanctions

a) Enforceable provisions covered by penalties in the Brussels Region

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions, which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive, are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code, which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any

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relatif à la limitation des émissions de certains polluants dans l'atmosphère en provenance des grandes installations de combustion 21 septembre 2002), Directive 2000/76/EC was transposed by Order of the Government of the Brussels Capital Region related to the incineration of waste (Arrêté du Gouvernement de la Région de Bruxelles-Capitale du 21 Novembre 2002 relatif à l'incinération des déchets)

[24] Ordonnance du 7 mars 1991 relative à la prévention et à la gestion des déchets

[25] Ordonnance du 5 Juin 1997 relative aux permis d'environnement

[26] Institut Bruxellois pour la gestion de l'environnement

[27] Inspectors can take all necessary measures to avoid, reduce, remedy dangers to the environment and to human health

infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Brussels Region
IPPC Directive	
Catch-all	
4	X
5	X
6	
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	
4(4)	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (4)	
5	
7 (1)	
9	
10	
13	
WID Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	
10 (1)	
10 (2)	
11	
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Latvia. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.14 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in the Brussels Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an installation without an environmental permit (Installations of category I A, I B and II) or a preliminary declaration (Installations of category I C or III) or without the approval required *(agrément)*. ***Article 33(5)(a) of the Ordinance of 25 March 1999***	A fine between Euros 625 to 62, 500. ***Article 33) of the Ordinance of 25 March 1999***	Operating an installation without an environmental permit (Installations of category I A, I B and II) or a preliminary declaration (Installations of category I C or III) or without the approval required *(agrément)*. ***Article 96(1)(2) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500 (x5.5)[28] A fine from Euros 2,50 (x 5.5) to 12 500 (x 5.5) for category I B installations, and installations requiring an approval A fine from Euros 25 (x 5.5) to 25,000 (x 5.5) for category IA installations These fines are multiplied by two when the infringement is knowingly done and with a profit motivation. ***Article 96 of the Ordinance on environmental permits*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment Sum of money equivalent to the spending of the region, communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health

[28] It is crucial to note that in Belgium criminal fines shall be multiplied by 5.5 according to the legal coefficient fixed on the current monetary value *(système des décimes additionnels)*

				The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise a professional activity ***Article 24 of the Ordinance of 25 March 1999.*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to supply information for application for permits	Not considered an administrative offence		Not considered as a criminal offence	
Obligation to notify the competent authority of any changes in the operation of an installation	Not considered an administrative offence		Failure to comply with the obligations of holders of environmental permits. These obligations include the notifications to the competent authorities of any changes since the issue of the environmental permits. ***Article 96(1)(5) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) A fine from Euros 2,50 (x 5.5) to 12 500 (x 5.5) for category I B installations, and installation requiring an approval[29] A fine from Euros 25 (x 5.5) to 25,000 (x 5.5) for category IA installations The fine is two-fold when the

				infringement is deliberate and motivated by profit ***Article 96) of the Ordinance on environmental permits*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise this professional activity . ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to comply with the conditions set	Failure to comply with the conditions set in the environmental permits or in	A fine between Euros 625 and 62,500. ***Article 33) of the Ordinance of 25***	Failure to comply with the conditions set in the environmental permits or in	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5)

in the permit or mandatory ELVs	the approval *(agrément)* or with the conditions of operation set by the government . ***Article 33(5)(d) of the Ordinance of 25 March 1999***	***March 1999***	the approval *(agrément)* or to the conditions of operation set by the government. ***Article 96(1)(1) of the Ordinance on environmental permits***	to 12,500(x 5.5) Fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) for category I B installations, and installation requiring an approval A fine from Euros 25(x 5.5) to 25,000 (x 5.5) for category IA installations The fine is two-fold when the infringement is deliberate and motivated by profit ***Article 96) of the Ordinance on environmental permits*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise this professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons :

				fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

*ELVs: Emission Limit Values

Table 15.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in the Brussels Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Operating an installation without an environmental permit (Installations of category I A, I B and II) or a preliminary declaration (Installations of category I C or III) or without the approval required *(agrément)*. ***Article 33(5)(a) of the Ordinance of 25 March 1999***	A fine between Euros 625 to 62,500. ***Article 33) of the Ordinance of 25 March 1999***	Operating an installation without an environmental permit (Installations of category I A, I B and II) or a preliminary declaration (Installations of category I C or III) or without the approval required (*agrément*). ***Article 96(1)(2) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50(x 5.5) to 12,500(x 5.5) Fine from Euros 2,50(x 5.5) to 12 500(x 5.5) for category I B installations, and installation requiring an approval Fine from Euros 25(x 5.5) to 25,000(x 5.5) for category IA installations These fines are multiplied by two when the infringement is knowingly done and with a profit motivation. ***Article 96 of the Ordinance on environmental permits*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment Sum of money equivalent to the spending of the region, communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state

				The closure or suspension in part or totally of the activity The prohibition to exercise this professional activity . ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Failure to comply with the conditions set in the environmental permits or in the approval *(agrément)* or with the conditions of operation set by the government ***Article 33(5)(d) of the Ordinance of 25 March 1999***	A fine between Euros 625 and 62,500 ***Article 33) of the Ordinance of 25 March 1999***	Failure to comply with the conditions set in the environmental permits or in the approval *(agrément)* or to the conditions of operation set by the government ***Article 96(1)(1) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500(x 5.5) Fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) for category I B installations, and installation requiring an approval A fine from Euros 25(x 5.5) to 25,000 (x 5.5) for category IA installations The fine is two-fold when the infringement is deliberate and motivated by profit ***Article 96) of the Ordinance on***

				environmental permits Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment Sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise this professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

Table 2.16 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Brussels Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Not considered an administrative offence		Failure to comply with the obligations of holders of environmental permits. These obligations include the notifications to the competent authorities of any changes since the issue of the environmental permits. ***Article 96(1)(5) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) A fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) for category I B installations, and installation requiring an approval A fine from Euros 25 (x 5.5) to 25, 000 (x 5.5) for category IA installations The fine is two-fold when the infringement is deliberate and motivated by profit ***Article 96) of the Ordinance on environmental permits*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to

				prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise this professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to comply with the conditions set in the permit or mandatory ELVs	Failure to comply with the conditions set in the environmental permits or in the approval *(agrément)* or with the conditions of operation set by the government. ***Article 33(5)(d) of the Ordinance of 25 March 1999***	A fine between Euros 625 and 62,500. ***Article 33) of the Ordinance of 25 March 1999***	Failure to comply with the conditions set in the environmental permits or in the approval *(agrément)* or to the conditions of operation set by the government . ***Article 96(1)(1) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) Fine from Euros 2,50 (x 5.5) to 12 500 (x 5.5) for category I B installations, and installation requiring an approval A fine from Euros 25(x 5.5) to 25,000 (x 5.5) for category IA installations The fine is two-fold when the infringement is deliberate and motivated by profit ***Article 96 of the Ordinance on environmental permits***

				Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise this professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

Table 2.17 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Brussels Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an installation without an environmental permit (Installations of category I A, I B and II) or a preliminary declaration (Installations of category I C or III) or without the approval required *(agrément)*. ***Article 33(5)(a) of the Ordinance of 25 March 1999***	A fine between Euros 625 to 62,500. ***Article 33) of the Ordinance of 25 March 1999***	Operating an installation without an environmental permit (Installations of category I A, I B and II) or a preliminary declaration (Installations of category I C or III) or without the approval required *(agrément)*. ***Article 96(1)(2) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500 (x5.5) A fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) for category I B installations, and installations requiring an approval A fine from Euros 25 (x 5.5) to 25,000 (x 5.5) for category IA installations These fines are multiplied by two when the infringement is knowingly done and with a profit motivation. ***(Article 96 of the Ordinance on environmental permits)*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment Sum of money equivalent to the spending of the region, communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or

				totally of the activity The prohibition to exercise a professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to supply information for application for permits	Not considered an administrative offence		Not considered as a criminal offence	
Obligation to notify the competent authority of any changes in the operation of an installation	Not considered an administrative offence		Failure to comply with the obligations of holders of environmental permits. These obligations include the notifications to the competent authorities of any changes since the issue of the environmental permits. ***Article 96(1)(5) of the Ordinance on environmental permit***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) A fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) for category I B installations, and installation requiring an approval A fine from Euros 25 (x 5.5) to 25,000 (x 5.5) for category IA installations The fine is two-fold when the infringement is deliberate and motivated by profit ***Article 96) of the Ordinance on environmental permits*** Complementary measures than can be issued by a judge

				Confiscation of movable goods that can potentially harm the environment sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise a professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to comply with the conditions set in the permits or mandatory Elves	Failure to comply with the conditions set in the environmental permits or in the approval *(agrément)* or with the conditions of operation set by the government. ***Article 33(5)(d) of the Ordinance of 25 March 1999***	A fine between Euros 625 and 62,500. ***Article 33) of the Ordinance of 25 March 1999***	Failure to comply with the conditions set in the environmental permits or in the approval *(agrément)* or to the conditions of operation set by the government. ***Article 96(1)(1) of the Ordinance on environmental permits***	Imprisonment from 8 to 12 months and/or a fine from Euros 2,50 (x 5.5) to 12,500(x 5.5) Fine from Euros 2,50 (x 5.5) to 12,500 (x 5.5) for category I B installations, and installation requiring an approval A fine from Euros 25(x 5.5) to 25,000 (x 5.5) for category IA installations

				The fine is two-fold when the infringement is deliberate and motivated by profit ***Article 96) of the Ordinance on environmental permits*** Complementary measures that can be issued by a judge Confiscation of movable goods that can potentially harm the environment sum of money equivalent to the spending of the Region, Communities or Brussels Environment Agency to prevent, reduce end or remedy harm to the environment or public health The rehabilitation of the environment to its previous state The closure or suspension in part or totally of the activity The prohibition to exercise a professional activity. ***Article 24 of the Ordinance of 25 March 1999*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or) ***Article 7 (bis) of the federal Criminal Code***

FLANDERS

1. Environmental protection: a regional competence

Belgium is a Federal State composed of three communities (the Flemish Community, the French Community and the German-speaking Community) and three regions (the Walloon Region, Flanders and the Brussels Capital Region).

Division of competences between the communities, the regions and the federal authority outlined in the 8 August 1980 special law of institutional reforms,[30] as amended, is complex and still on-going.

The federal authority remains competent in several areas, such as national defence, justice, labour law, consumer protection and some aspects of public health. Environmental protection is under the competence of the regions. However, the federal authority is still competent for:
- Establishing product standards;
- Protection against radiation, including radioactive waste;
- Transit of waste; and
- Import, export and transit of non-indigenous species;

Flanders is thus competent to transpose Directive 2008/1/EC, Directive 1999/13/EC, Directive 2001/80/EC and Directive 2000/76/EC and enforce their requirements through the setting of sanction regimes and inspection bodies.

Even though the Regions are competent to set their own sanction regime, this has to be done in the framework of the Federal legislation, in particular the Criminal Code. This is important in relation to the applicability of sanctions to legal persons. The provisions related to the criminal liability of legal persons in Belgium are included in Article 7(bis) of the Federal Criminal Code. The criminal sanctions for legal persons (a fine, the confiscation of goods, the dissolution of the legal person, the prohibition to exercise an activity, the closure of the activity, the publication or dissemination of the decision) are thus harmonised in the three regions.

Another specificity of the Belgian criminal system, which applies across the three regions, is that criminal fines shall be multiplied by 5.5 according to the legal coefficient fixed on the current monetary value (*système des décimes additionnels*).[31]

2. Overview of penalties related to legislation on industrial installations

In Flanders the legal framework for industrial installations is encompassed in the Decree of 28 June 1985 on environmental permits (hereinafter 1985 Decree).[32] This Decree has been implemented by two executive Orders (VLAREM I and VLAREM II) of the Flemish Government that regulate in details the licensing procedure and environmental conditions for environmentally harmful establishments. The Decree of the Flemish Government on the establishment of the Flemish

[30] Loi spéciale de réformes institutionnelles du 8 août 1980 (M.B. du 15/08/1980, p. 9434).
[31] Loi du 5 mars 1952 relative aux décimes additionnels sur les amendes pénales.
[32] 28 JUNI 1985. - Decreet betreffende de milieuvergunning. Decree of 28 June 1985 on environmental permits, (publication on 17 September 1985, entry into force on 01 September 1991, last amendment by Decree of the Flemish Council of 11 June 2010).

Regulations concerning environmental permits (hereinafter VL:AREM I), dates from February 1991.[33] Vlarem II is the Decree of the Flemish Government of 1 June 1995 concerning general and sectoral provisions relating to environmental hygiene (hereinafter VLAREM II).[34] VLAREM II contains the environmental conditions that apply to installations.

The Decree of 5 April 1995 on general provisions on environmental policy (hereinafter 1995 Decree) lays down provision on monitoring and penalties (Title XVI).

In addition, the Decree of 12 December 2008 of the Decree on environmental policy (hereinafter 2008 Decree) lays down the procedure that must be followed in establishing and contesting an environmental violation or environmental crime. Its Annex contains a list of environmental offences, subject to an administrative fine.[35]

The requirements of Directive 2008/1/EC, Directive 1999/13/EC, Directive 2001/80/EC and Directive 2000/76/EC have been transposed via (amendment to) VLAREM II.

Pursuant to Article 39 of the 1985 Decree the enforcement procedure related to the infringement of the requirements of this Decree and two implementing executive Orders (VLAREM I and VLAREM II) shall be set in conformity with Title XVI of the 1995 Decree. Chapter VI of Title XVI of the 1995 Decree regulates criminal enforcement in relation to environmental infringements. This Decree provides for catch-all criminal offences and does not set criminal sanctions for the specific infringements of the requirements of the Directives related to industrial installations. For instance, Article 16.6.1 of the 1995 Decree provides that each breach of environmental legislation committed deliberately or by lack of precaution or care can be punished with a fine of Euros 100 (x 5.5) to 250,000 (x 5.5) and/or imprisonment of one month to one year.

If the public prosecutor considers that the infringement to the environmental legislation is a criminal offence and triggers a criminal procedure, the administrative one shall be suspended (see Article 16.4.30 and following of the 1995 Decree).

An administrative sanction (*bestuurlijke maatregel*) is a measure that is aimed specifically at terminating an environmental infringement or an environmental crime, to undo its consequences and to prevent recurrence, in other words, it aims at restoration of the environment. The supervisor (the Environmental Inspectorate), governor or mayor is empowered to take an administrative measure. These can be an order for regularisation, a prohibition order and/or a form of administrative order.[36] Administrative sanctions are regulated in the 1995 Decree. Title XVI, Chapter IV regulates administrative enforcement; Articles 16.4.5 and following further regulate the administrative sanctions.

According to Article 16.4.7 of the 1995 Decree, administrative enforcement measures may take the form of, for example, an order to the suspected offender to take steps to reduce the environmental infraction or environmental crime, to partially or fully terminate its effects or to avoid repetition; or an order to the suspected offender to end activities, operations or to end the use of certain items.

[33] 6 FEBRUARI 1991. - Besluit van de Vlaamse Executieve houdende vaststelling van het Vlaams reglement betreffende de milieuvergunning **(**publication on 26 June 1991, entry into force**:** 01 September 1991).
[34] 1 JUNI 1995. - BESLUIT van de Vlaamse regering houdende algemene en sectorale bepalingen inzake milieuhygiëne.
[35] 12 DECEMBER 2008. - Besluit van de Vlaamse Regering tot uitvoering van titel XVI van het decreet van 5 april 1995 houdende algemene bepalingen inzake milieubeleid (entry into force on 01 May 2009).
[36] See: http://www.lne.be/themas/handhaving/afdeling-milieuhandhaving-milieuschade-en-crisisbeheer.

An administrative fine (*bestuurlijke geldboete*) is a penalty where the offender is required to pay a sum of money. For administrative fines, a distinction is made between an exclusive or alternative fine (Article 16.4.27 of the 1995 Decree).

- An exclusive administrative fine is only imposed in case of environmental offences. These are infringements to the administrative requirements, exhaustively listed by the Flemish Government in the Annexes to the Implementation Decree on the Environment (2008 Decree). These infringements cannot be subject to criminal sanctions. The amount of an exclusive administrative fine can be up to a maximum of Euros 50,000. Article 16.4.40 and followings lay down the requirements for the exclusive administrative sanctions.

- An alternative administrative fine can only be imposed for environmental crimes. In principle, these offences are dealt with under criminal law, however when the public prosecutor decided not to prosecute a case and timely notifies the Department Enforcement of Environmental damage and crisis management (*Afdeling Milieuhandhaving, Milieuschade en Crisisbeheer*, AMMC), the environmental crime is punishable by an alternative administrative fine. This amounts to between 0 and maximum Euros 250,000. Article 16.4.31 to 16.4.39 lay down the requirements for the alternative administrative sanctions.

- In addition, the 1995 Decree provides for other coercive administrative measures. Pursuant to Title XVI, Chapter IV of the Decree on environmental policy, environmental inspectors, governors and mayors are empowered to issue administrative coercive measures aiming at terminating infringements to environmental legislation (e.g. injunctions to comply with environmental requirements, the suspension of the operation of the installations, the sealing of the installations).

The Environmental Inspection Division of the Department of Environment, Nature and Energy[37] of the Flemish Region is in charge of enforcing the Flanders environmental legislation and consequently the requirements of the Directives on industrial installations. The environmental Inspection is responsible for supervising installations. The inspectors can issue advices, warnings and final notices. If it operates without a permit, an installation can be subject to closure, partial or full.

3. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Belgium (Flanders)

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in

[37] Afdeling Milieu-inspectie van het Departement Leefmilieu, Natuur en Energie.

framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

On the basis of Article 16.6.1 of the 1995 Decree, any violation of regulations enforced by the 1995 Decree (covering the 1985 Decree and VLAREM I and II), committed intentional or through lack of foresight or prudence is punishable by imprisonment from one month to two years and a fine of Euros 100 to 250,000, or one of these penalties (environmental *crime*).[38] These penalties do not apply to behaviour defined as an environmental *offence* (on the basis of Article 16.1.2, 1, and Article 16.4.27 (a) of the 1995 Decree), and listed in the Annexes to the 2008 Decree as exclusive administrative sanctions.

Failure to comply with the legal obligations that are listed in the Annex is considered an environmental offence.

For example, Article 5.43.2.1.3 Vlarem II (Section 5.43.2 on large combustions plants) regulates that smoke and exhaust gases from combustion plants shall be discharged through a chimney in a controlled manner (Art. 9 LCP Directive). Article 5.43.2.1.3(7) states that the results of the measurement or calculations must be kept available for inspection by the supervisory officials, which is marks as an offence in Annex VII to the 2008 Decree, subject to an alternative administrative sanction.

Article	Belgium (Flanders)
IPPC Directive	
Catch-all	C[39]
4	
5	
6	
12 (1)	
12 (2)	
14 (a)	
14 (b)	
14 (c)	
VOC Directive	
Catch-all	C
3(2)	
4	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	

[38] Alternative administrative offences can only apply for offences listed in Articles 16.6.1, 16.6.2, 16.6.3. 16.6.3 bis, 16.6.3 ter, 16.6.3 quarter, 16.6.3 quinquies, 16.6.3 sexies, 16.6.3 septies of the 1995 Decree.
[39] The catch all in this table applies to criminal offences.

Catch-all	C
4 (1)	
4 (2)	
4 (4)	
5	Example : 5.43.2.1.2, § 3
7 (1)	
9	
10	
13	
WI Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	
10 (1)	
10 (2)	
11	
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Flanders. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste

incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 3.1. *Directive 2008/1/EC (IPPC Directive)*

	Administrative [40]		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	Art. 36(1) of the 1985 Decree states that the competent authority may suspend or terminate the environmental permit in the cases where the provisions of this decree, its implementing decrees and applicable permit conditions are not observed. The revocation, suspension and cancellation of the permit is further elaborated in ***Art. 46 and 47 of VLAREM I.*** The 1995 Decree, (Title XVI on supervision, enforcement and safety measures), applies to VLAREM.. This covers administrative enforcement measures (set out in Art. 16.4.7.) and administrative fines, (Art. 16.4.25 and 16.4.26) as well as (exclusive) administrative offences listed in the Annex to the 2008 Decree. The amount of an exclusive administrative fine can range from 0 to a maximum of Euros 50,000 (x 5.5).	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	The 1995 Decree, including Title XVI on supervision, enforcement and safety measures, applies (via Art. 16.1.1.(13)) to the 1985 Decree and its implementing decrees (VLAREM). According to Art. 16.6.1, any intentional violation or violation that occurs as a result of foresight or prudence of the regulations enforced by this title is punishable by imprisonment from one month to two years and a fine of Euros 100 to Euros 250,000,[41] or by one of these penalties.
Obligation to supply information	The application for a permit must contain all information required,	Same as above	The application for a permit must contain all information required,	Same as above

[40] The 2008 Decree list environmental offences in its Annexes, that are subject to exclusive administrative sanctions. The national expert notes that the main obligations listed in the tables of this study (permit, information and notification etc.) cannot be identified in the Annex. It is also noted that VLAREM I, in which the requirements on permit, information and notification etc. are can be found (see Column on administrative offences), are not mentioned in the Annexes to the 2008 Decree.

[41] It is crucial to note that in Belgium criminal fines shall be multiplied by 5.5 according to the legal coefficient fixed on the current monetary value *(système des décimes additionnels)*

for application for permits	as indicated in the model for a permit application included in Annex 4 as well as all relevant annexes prescribed by this article. In addition, Article 6 sets additional requirements for class 1 and 2 installations. ***Art. 5(2) of VLAREM I***		as indicated in the model for a permit application included in Annex 4 as well as all relevant annexes prescribed by this article. In addition, Article 6 sets additional requirements for class 1 and 2 installations. ***Art. 5(2) of VLAREM I***	
Obligation to notify the competent authority of any changes in the operation of an installation	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that require the application of a new permit. Only changes that lead to the necessity to modify a permit need to be notified. ***6bis (1) VLAREM I***	Same as above	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that require the application of a new permit. Only changes that lead to the necessity to modify a permit need to be notified. ***6bis (1) VLAREM I***	Same as above
Obligation to comply with the conditions set in the permit or mandatory ELVs	• Chapter 4 of VLAREM II lays down general environmental conditions for classified installations. These include requirements for emissions via water and via air. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator, and shall remain available for supervision by the competent authority for a	Same as above	• Chapter 4 of VLAREM II lays down general environmental conditions for classified installations. These include requirements for emissions via water and via air. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator, and shall remain available for supervision by the competent authority for a	Same as above

	period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4). • Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.		period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4). • Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.	

*ELVs: Emission Limit Values

Table 3.2. *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Belgium (Flanders)*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	Art. 36(1) of the 1985 Decree states that the competent authority may suspend or terminate the environmental permit in the cases where the provisions of this decree, its implementing decrees and applicable permit conditions are not observed. The revocation, suspension and cancellation of the permit is further elaborated in Art. 46 and 47 of ***VLAREM I.*** The 1995 Decree, (Title XVI on supervision, enforcement and safety measures), applies to VLAREM.. This covers administrative enforcement measures (set out in Art. 16.4.7.) and administrative fines, (Art. 16.4.25 and 16.4.26) as well as (exclusive) administrative offences listed in the Annex to the 2008 Decree. The amount of an exclusive administrative fine can range from 0 to a maximum of Euros 50,000 (x 5.5).	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	The 1995 Decree , including Title XVI on supervision, enforcement and safety measures, applies (via Art. 16.1.1.(13)) to the 1985 Decree and its implementing decrees (VLAREM). According to Art. 16.6.1, any intentional violation or violation that occurs as a result of foresight or prudence of the regulations enforced by this title is punishable by imprisonment from one month to two years and a fine of Euros 100 to Euros 250,000, or by one of these penalties.
Obligation to supply information for application for permits	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that requires the application of a new permit. Only changes that lead to the necessity to modify a permit need to be notified.	Same as above	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that requires the application of a new permit. Only changes that lead to the necessity to modify a permit need to be notified.	Same as above

	Regarding the control of air pollution, Art. 4.4.2.4. of Vlarem II requires that the operator of a first class facility in which waste gases emissions are higher than the emission limits set according to Art. 4.4.2.2 (through chimneys) the operator needs provide calculations to the supervisor before making use of the facility.		Regarding the control of air pollution, Art. 4.4.2.4. of Vlarem II requires that the operator of a first class facility in which waste gases emissions are higher than the emission limits set according to Art. 4.4.2.2 (through chimneys) the operator needs provide calculations to the supervisor before making use of the facility.	
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	• Chapter 2.9 of VLAREM II lays down the general environmental conditions for VOC in Flanders. Chapter 2.10 establish emission ceilings (set out in Annex 2.10.A) VLAREM II. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator , and shall remain available for supervision by the competent authority for a period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4).	Same as above	• Chapter 2.9 of VLAREM II lays down the general environmental conditions for VOC in Flanders. Chapter 2.10 establish emission ceilings (set out in Annex 2.10.A) VLAREM II. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator, and shall remain available for supervision by the competent authority for a period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4).	Same as above

	• Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.		• Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.	

Table 3.3. *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Belgium (Flanders)*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	Art. 36(1) of the 1985 Decree states that the competent authority may suspend or terminate the environmental permit in the cases where the provisions of this decree, its implementing decrees and applicable permit conditions are not observed. The revocation, suspension and cancellation of the permit is further elaborated in Art. 46 and 47 of VLAREM I. The 1995 Decree, (Title XVI on supervision, enforcement and safety measures), applies to VLAREM.. This covers administrative enforcement measures (set out in Art. 16.4.7.) and administrative fines, (Art. 16.4.25 and 16.4.26) as well as (exclusive) administrative offences listed in the Annex to the 2008 Decree. The amount of an exclusive administrative fine can range from 0 to a maximum of Euros 50,000 (x 5.5).	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	The 1995 Decree , including Title XVI on supervision, enforcement and safety measures, applies (via Art. 16.1.1.(13)) to the Decree of 28 June 1985 and its implementing decrees (VLAREM). According to Art. 16.6.1, any intentional violation or violation that occurs as a result of foresight or prudence of the regulations enforced by this title is punishable by imprisonment from one month to two years and a fine of Euros 100 to Euros 250,000, or by one of these penalties.
Obligation to supply information for application for permits	The application for a permit must contain all information required, as indicated in the model for a permit application included in Annex 4 as well as all relevant annexes prescribed by this article. Art.6 sets additional requirements for class 1 and 2	Same as above	The application for a permit must contain all information required, as indicated in the model for a permit application included in Annex 4 as well as all relevant annexes prescribed by this article. Art.6 sets additional requirements for class 1 and 2	Same as above

	installations. ***Art. 5(2) of VLAREM I***		installations. ***Art. 5(2) of VLAREM I***	
Obligation to notify the competent authority of any changes in the operation of an installation	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that require the application of a new permit. Only changes that lead to the necessity to modify a permit need to be notified. ***Art. 6bis (1) VLAREM I***	Same as above	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that require the application of a new permit. Only changes that lead to the necessity to modify a permit need to be notified. ***Art. 6bis (1) VLAREM I***	Same as above
Obligation to comply with the conditions set in the permit or mandatory ELVs	• Art. 5.2.3bis 1.12 lays down the emission limits for combustion plants that co-incinerate waste. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator , and shall remain available for supervision by the competent authority for a period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4). • Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.	Same as above	• Art. 5.2.3bis 1.12 lays down the emission limits for combustion plants that co-incinerate waste. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator , and shall remain available for supervision by the competent authority for a period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4). • Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.	Same as above

Table 3.4. *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Belgium (Flanders)*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	Art. 36(1) of the 1985 Decree states that the competent authority may suspend or terminate the environmental permit in the cases where the provisions of this decree, its implementing decrees and applicable permit conditions are not observed. The revocation, suspension and cancellation of the permit is further elaborated in ***Art. 46 and 47 of VLAREM I.*** The 1995 Decree, (Title XVI on supervision, enforcement and safety measures), applies to VLAREM. This covers administrative enforcement measures (set out in Art. 16.4.7.) and administrative fines, (Art. 16.4.25 and 16.4.26) as well as (exclusive) administrative offences listed in the Annex to the 2008 Decree. The amount of an exclusive administrative fine can range from 0 to a maximum of Euros 50,000 (x 5.5).	To exploit a nuisance installation that is classified as first or second class, without the prior written permit from the competent authorities. ***Art. 5(1) VLAREM I***	The 1995 Decree , including Title XVI on supervision, enforcement and safety measures, applies (via Art. 16.1.1.(13)) to the 1985 Decree and its implementing decrees (VLAREM). According to Art. 16.6.1, any intentional violation or violation that occurs as a result of foresight or prudence of the regulations enforced by this title is punishable by imprisonment from one month to two years and a fine of Euros 100 to Euros 250.000, or by one of these penalties.
Obligation to supply information for application for permits	Art. 5(2) of VLAREM I: The application for a permit must contain all information required, as indicated in the model for a permit application included in Annex 4 as well as all relevant annexes prescribed by this article. In addition, Article 6 sets	Same as above	Art. 5(2) of VLAREM I: The application for a permit must contain all information required, as indicated in the model for a permit application included in Annex 4 as well as all relevant annexes prescribed by this article. In addition, Article 6 sets	Same as above

	additional requirements for class 1 and 2 installations.		additional requirements for class 1 and 2 installations.	
Obligation to notify the competent authority of any changes in the operation of an installation	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that requires the application of a new permit. This means that only changes that lead to the necessity to modify a permit need to be notified.	Same as above	Art. 6bis (1) VLAREM I lists the changes to an installation with a permit provided under Art. 5 and 6 that requires the application of a new permit. This means that only changes that lead to the necessity to modify a permit need to be notified.	Same as above
Obligation to comply with the conditions set in the permits or mandatory ELVs	• The main requirement for emission requirements for incineration plants are listed in Art. 5.2.3bis.1.15 VLAREM II. • According to Art. 5.2.6.1.1. Vlarem II, measures should be taken to prohibit the abandonment or uncontrolled disposal of waste ban. • Art. 5.2.1.3 Vlarem II requires the operator to establish a workplan that is handed over to the supervior. In addition: • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator , and shall remain available for supervision by the competent authority for a period of five years (Section 4.1.4.). • The operator has the obligation to	Same as above	• The main requirement for emission requirements for incineration plants are listed in Art. 5.2.3bis.1.15 VLAREM II. • According to Art. 5.2.6.1.1. Vlarem II, measures should be taken to prohibit the abandonment or uncontrolled disposal of waste ban. • Art. 5.2.1.3 Vlarem II requires the operator to establish a workplan that is handed over to the supervior. In addition: • According to Art. 5.2.6.1.1. Vlarem II, measures should be taken to prohibit the abandonment or uncontrolled disposal of waste ban. • According to Art. 4.1.5.1 of Vlarem II, the operator has a duty to provide information. On their request, the operator provides the supervisory officials the relevant information on the recourse used and produces in the installation, products, waste streams or emissions. • The information derived from the obligations for measurement and registration is kept by the operator , and shall remain available for	Same as above

	inform the competent authority regarding of releases (Section 4.2.4). • Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.		supervision by the competent authority for a period of five years (Section 4.1.4.). • The operator has the obligation to inform the competent authority regarding of releases (Section 4.2.4). • Art. 4.1.3.3 and 4.1.3.4 require the operator to take measures immediately when damage to the environment threatens, and informs the mayor and relevant competent authorities. • Section 4.1.8 requires a yearly environment report.	

WALLOON REGION

1. Environmental protection: a regional competence

Belgium is a Federal State composed of three communities (the Flemish Community, the French Community and the German-speaking Community) and three regions (the Walloon Region, Flanders and the Brussels Capital Region)

Division of competences between the communities, the regions and the federal authority outlined in the special law on institutional reforms of 8 August 1980 special law of institutional reforms[42] is complex and still on-going.

The federal authority remains competent in several areas, such as national defence, justice, labour law, consumer protection and some aspects of public health. Environmental protection is under the competence of the regions. However, the federal authority is still competent for:
- Establishing product standards;
- Protection against radiation, including radioactive waste;
- Transit of waste; and
- Import, export and transit of non-indigenous species.

The Walloon Region is thus competent to transpose Directive 2008/1/EC, Directive 1999/13/EC, Directive 2001/80/EC and Directive 2000/76/EC and enforce their requirements through the setting of sanction regimes and inspection bodies.

Even though the Regions are competent to set their own sanction regime, this has to be done in the framework of the Federal legislation, in particular the Criminal Code. This is important in relation to the applicability of sanctions to legal persons. The provisions related to the criminal liability of legal persons in Belgium are included in Article 7(bis) of the Federal Criminal Code. The criminal sanctions for legal persons (a fine, the confiscation of goods, the dissolution of the legal person, the prohibition to exercise an activity, the closure of the activity, the publication or dissemination of the decision) are thus harmonised in the three regions.

Another specificity of the Belgian criminal system, which applies across the three regions, is that criminal fines shall be multiplied by 5.5 according to the legal coefficient fixed on the current monetary value (*système des décimes additionnels*).[43]

2. Overview of penalties related to legislation on industrial installations

Directive 2008/1/EC was transposed in the Walloon Region by the Decree on environmental permit[44] which, read in conjunction with the Decree on environmental offences,[45] sets the offences and the related administrative and criminal sanctions.

Directive 1999/13/EC, Directive 2001/80/EC and Directive 2000/76/EC were transposed by Orders of the Government of the Walloon Region.[46] These Orders do not set any sanctions. The activities that

[42] Loi spéciale de réformes institutionnelles du 8 août 1980 (M.B. du 15/08/1980, p. 9434)
[43] Loi du 5 mars 1952 relative aux décimes additionnels sur les amendes pénales.
[44] Décret du 11 mars 1999 relatif au permis d'environnement.
[45] Décret relatif à la recherche, la constatation, la poursuite et la répression des infractions et les mesures de réparation en matière d'environnement.
[46] Arrêté du Gouvernement de la Région de Bruxelles-Capitale du 21 Novembre 2002 relatif à l'incinération des déchets.

fall under these Orders shall, however, be granted an environmental permit under the Ordinance on environmental permit and the requirements set by the sectoral Orders mentioned above are considered as conditions to be fulfilled in environmental permits, their infringements leading to administrative or criminal sanctions pursuant to the Decree on environmental permit read in conjunction with the Decree on environmental offences.

Administrative or criminal sanctions apply in case of infringement of environmental legislation in the Walloon Region. However if the public prosecutor considers that the infringement to the environmental legislation is a criminal offence and triggers a criminal procedure, the administrative one shall be suspended.

The Decree on environmental offences gathers the different categories of administrative and criminal sanctions. It classifies environmental sanctions in four categories (category 1 being the more stringent). Criminal sanctions of category one can lead to imprisonment from 10 to 15 years and a fine up to Euros 10,000,000 (these are infringements leading to category 2 sanctions that were done in purpose and maliciously or that potentially endangered human health). The administrative sanctions listed in this Decree can lead to a fine up to Euros 100,000.

The Police and Inspection of the General Directorate of Agriculture, Natural Resources and Environment[47] is in charge of inspecting and enforcing the environmental legislation in the Walloon Region. In case of infringement a letter of formal notice is sent to the operators of industrial installations. If within a specific deadline the operator does not comply with the relevant injunctions, the inspectors can issues enforcing measures such as the fall or partial suspension of the activity, the sealing of the activity or any other appropriate measures to eliminate any risk to the environment and human health.[48]

a) Enforceable provisions covered by penalties in Walloon Region

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions, which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive, are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code, which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

[47] Direction Generale de l'Agriculture des Ressources naturelles et de l'Environnement (DGARNE)
[48] See Chapter III Articles D.148 and D.149 of the Decree on environmental offences

Article	Walloon
IPPC Directive	
Catch-all	
4	X
5	X
6	
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	
4(4)	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (4)	
5	
7 (1)	
9	
10	
13	
WI Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	
10 (1)	
10 (2)	
11	
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Wallon Region. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.18 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in the Walloon Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating a classified installation without a permit. ***Articles 10(1) and 11 of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 100,000. ***Article D.160 (2)(1) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permits***	Operating a classified installation without a permit. ***Articles 10(1) and 11 of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5).[49] If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal persons, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to supply	Not considered as an administrative		Not considered as a criminal offence	

[49] It is crucial to note that in Belgium criminal fines shall be multiplied by 5.5 according to the legal coefficient fixed on the current monetary value *(système des décimes additionnels)*

information for application for permits	offence			
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 10,000. ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permits***	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5) If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5) ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution of the legal person, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to comply with the conditions set in the permit or mandatory ELV's	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in***	A fine from Euros 50 to 100,000 ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permit***	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5)

	conjunction with Article 77 of this Decree		***conjunction with Article 77 of this Decree***	If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

*ELVs: Emission Limit Values

Table 19.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Walloon*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 10 000. ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permit***	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose and maliciously or human health was potentially endangered. ***(Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree)*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to supply information for application for permits				

Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELV's	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 100,000. ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permit***	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

Table 2.20 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in the Walloon Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 10,000 ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permits***	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution, prohibition to exercise an activity, closure of the activity, publication or

				dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to comply with the conditions set in the permit or mandatory ELVs	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 100,000. ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permit***	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, the dissolution, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

Table 2.4 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in the Walloon Region*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating a classified installation without a permit. ***Articles 10(1) and 11 of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 100,000. ***Article D.160 (2)(1) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permits***	Operating a classified installation without a permit. ***Articles 10(1) and 11 of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, dissolution of the legal person, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to supply information for	Not considered as an administrative offence		Not considered as a criminal offence	

application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 10,000. ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permits***	Failure to notify in a register any modification or extension of installations of category I and II. ***Article 10(2) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine, confiscation, dissolution of the legal person, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***
Obligation to comply with the conditions set in the permit or mandatory ELVs	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	A fine from Euros 50 to 100,000. ***Article D.160 (2)(2) of the Decree on environmental offences read in conjunction with Article 77 of the decree on environmental permit***	Failure to comply with the general or by sector conditions or complementary conditions set by the competent authorities. ***Article 58(1) of the Decree on environmental permit read in conjunction with Article 77 of this Decree***	Sanction for individual persons: - Imprisonment 10 to 15 years and/or - Fine from Euros 100,000 (x5.5) to 10,000,000 (x5.5). If the infringement was done in purpose

				and maliciously or human health was potentially endangered. ***Article D.151(1) first paragraph Decree on environmental offences read in conjunction with Article D.153 of this Decree*** - Imprisonment of 8 days to three years and or - fine of Euros 100 (x 5.5) to a maximum of 1,000,000 (x 5.5). ***Article D.151(1) second paragraph Decree on environmental offences*** Sanctions for legal persons : fine,confiscation, dissolution of the legal person, prohibition to exercise an activity, closure of the activity, publication or dissemination of the sentence (and/or). ***Article 7 (bis) of the federal Criminal Code***

Annex III - Bulgaria

BULGARIA

1. Overview of penalties related to legislation on industrial installations

In Bulgaria, the legal system is based upon the continental system of codification. The Environmental Protection Act (SG91/2002) is the primary legislation relating to industrial installations. More specific legislative provisions relating to each of the four Directives is outlined below. Breach of environmental laws and/or permits in Bulgaria may involve administrative and/or criminal liabilities. Administrative and criminal liability and sanctions are regulated in two framework acts, the Administrative Violations and Sanctions Act and the Criminal Code.

Environmental offences and corresponding sanctions are set up in specific environmental laws and, in conformity with the general principle of '*lex specialis derogat legi generali*' the legal provision, which governs a specific matter, takes precedence over the general law. The rule is that the administrative offences and sanctions shall be laid down in laws. As an exception they may be laid down in an Ordinance. In the area of industrial installations, covered by this study these are provided in the following legislative acts:

- Environmental Protection Act (EPA) (SG 91/2002) – provides general framework on environmental offences, corresponding sanctions and competent authorities.
- Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values (SG 69/2003). The Ordinance is issued on the basis of Article 69 of the EPA and stipulates the sanctions and the procedures for imposing of sanctions in cases of harm to or pollution of the environment above the limit values or in cases of breach of the ELVs laid down in the environmental permits or integrated permits.
- Clean Ambient Air Act (CAAA) (SG 45/1996) – determines sanctions in cases of breach of the air quality legislation and, in particular, the provisions transposing the VOC Directive and LCP Directive.
- Waste Management Act (WMA) (SG 86/2003) – lays down the penalties for breaching the requirements of waste management legislation, including for operating the installations for incineration and co-incineration of waste.

The competent authorities may impose administrative sanctions such as fines. Either individuals or legal entities may be administratively liable in the case of a violation of established statutory/permit requirements. The competent authorities have the power to impose one-off or recurrent fines, to take administrative coercive measures against operators (including termination of the activity), to issue mandatory prescriptions (for stopping non-compliance with the permits and/or legal provisions) and/or revoke or amend the granted permit. The competent authorities (CA) for industrial installations in Bulgaria are the Minister of Environment and Water (or officials duly authorised thereunder) - at national level and the Directors of the Regional Inspectorates on Environment and Waters (RIEW) (or duly authorised officials) - at regional level.

Pursuant to the Environmental Protection Act, Article 158, the CA has the power to impose administrative coercive measures in case of:
1. Accidents caused by acts or lack of action of owners or users of facilities and areas;
2. Disaster situations;
3. Occurrence of an immediate danger of environmental pollution or damage or of damage to human health or property;
4. Prevention or termination of administrative violations related to environmental protection, as well as prevention and/or elimination of the harmful consequences of such violations.

Coercive administrative measures can be preventive, suspensive and/or restorative (EPA Article 159(1)). In performing their control functions, the CA may carry out on-site inspections, document checking, sample and monitoring testing. According to the Bulgarian legislation, the CA should apply the principle of proportionality when laying down sanctions, taking into account the specific circumstances of each particular case and the purposes of the administrative penalties specified in Article 12 of the Administrative Violations and Sanctions Act and requirements set out in Article 27 - severity of the infringement, motivation of the offender, his economical status and other other mitigating and aggravating circumstances, as well as the extent of the risk caused by the infringement.

The Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values sets up a method and rules for determining the sanctions in case of breach of the ELVs –the pecuniary sanction is calculated on the basis of a single amount of the penalty for each pollutant, the total quantity of the pollutant emission over the ELV and the duration of the violation.

The Criminal Code has only few provisions on environmental offences, listed in Chapter 11, Section III (Articles 352-353d). They cover offences related to pollution of the environment, oil pollution of sea waters, illegal transboundary shipping of hazardous waste, dangerous chemicals and/or substances and radioactive substances.

Two provisions are relevant to the legislation on industrial installations.

Under Article 352, intentional pollution of the soil, air or waters is punishable with imprisonment of up to 5 years and a fine of up to BGN 5,000 with liability resting with the individual who has committed the crime. In cases of negligence, the punishment is probation or a fine, between 100 and 300 BGN. In minor cases the sanction is a fine up to 300 BGN, imposed by administrative order.

Under Article 353, an official who allows exploitation of a power plant without the necessary treatment facilities is liable to imprisonment up to 3 years and a fine of up to BGN 3,000 (in cases of intentional offence) or probation and a fine of 100 to 300 BGN in case of negligence or minor cases. The same punishments are envisaged for the official, responsible for the construction and proper exploitation of treatment facilities, who does not fulfil his obligation to ensure the continuous proper operation of the facility leading to a full or partial cessation or discontinuation of the facility's operations.

Such criminal sanctions only apply to natural persons. Legal entities cannot be subject to criminal penalties.

It should be noted that the span of the fines under the environmental laws is broader than the one for those envisaged in the Criminal Code (the provisions on the environmental crimes have not been updated since 2004).

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Bulgaria

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it was not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed or there is no sanction attached to the obligation, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision. In the case of Bulgaria, the catch-all provisions will cover some obligations (in this case, the row is left empty), while in other cases, the relevant offence is sanctioned under a specific provision (in this case, there a 'X' in the row).

Article	Bulgaria
IPPC Directive	
Catch-all	C
4	
5	
6	
12 (1)	X
12 (2)	
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	-[50]
4(4)	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	-
5 (8)	X
5 (9)	X
5 (10)	-
8 (1)	-
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (3)	-
5	
7 (1)	-
9	X
10	
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X

[50] For VOC installations not covered by IPPC.

7	X
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	-
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	--
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Bulgaria. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.21 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Bulgaria*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Construction of a new installation without a permit and/or operation of an existing installation without an integrated environmental permit. ***Environmental Protection Act, Article. 117***	There is no specific sanction for breach of Article 117. The catch-all provision of Article 162, which provides sanctions for administrative violations of EPA, applies. Pecuniary sanction to the amount of 100 to 6,000 BGN for individuals and 1,000 to 20,000 BGN for legal persons and sole traders. For repeated infringements, the sanction is two-fold. For minor infringements committed by individuals, the fine is 100 BGN. ***Environmental Protection Act, Article 162***	Catch-all provision of Article 352 of the Criminal Code applies.	Catch-all provision of Article 352 of the Criminal Code applies.
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to include specific information in the application for permits, such as description of the installation and its activities, the raw and auxiliary materials, other substances and the energy used in or generated by the installation, etc. ***Environmental Protection Act, Article 122***	Pecuniary sanction to the amount of 100 to 6,000 BGN for individuals and 1,000 to 20,000 BGN for legal persons and sole traders. For repeated infringements, the sanction is two-fold. For minor infringements committed by individuals, the fine is 100 BGN. ***Environmental Protection Act, Article 162*** If the information in the application is not complete as required by law and/or it cannot be verified by the competent authorities by checking at site and/or the applicant does not supply any additional information requested by the competent authority the application for		

		issuing an integrated permit is rejected as laid down in ***Environmental Protection Act, Article. 122a(4)*** Although it is not explicitly provided in the EPA if the integrated permit is issued on the basis of false information submitted to the competent authorities this should be regarded as an administrative offence. In this case the catch-up provision of Article 162 should apply.		
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes in the operation of the installation without notification. ***Environmental Protection Act, Article 125(1)***	A pecuniary sanction for the operator of the installation, both legal person or sole trader, of 10,000 to 100,000 BGN ***Environmental Protection Act, Article 164 (1)*** Articles 162 and 164(1) of the EPA do not apply to the same violations. While Article 162 has more general nature and applies to all administrative violations of EPA, for which there is no specific sanctions, Article 164 applies specifically to violations of Article 125 of EPA (which stipulates obligations of the operator of IPPC installations). However in some cases Article 164 is regarded as a kind of catch-all provision as it covers violation of all obligations, set out in Article 125, without any differentiation between them.		
Obligation to comply with the conditions set in the permit or mandatory ELVs	<u>Infringement or non-compliance with the following requirements:</u> Obligation to fulfil the permit conditions. ***Environmental Protection Act, Article 125(2)*** Obligation of the operator (sole trader or legal entity) to comply with the ELVs	A pecuniary sanction for the operator of the installation, both legal person or sole trader, of 10,000 to 100,000 BGN. ***Environmental Protection Act, Article 164 (1)*** Pecuniary sanction is imposed, calculated on the basis of a single		

	set in the permit or integrated permit. ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values, Article 1***	amount of the penalty for each pollutant (as laid down in tables), the total quantity of the pollutants exceeding ELV and the duration of the violation. There are formulas in the Ordinance on the basis of which the sanction for each case is calculated. The single amount of the pollutants is given in BGN per kg for water and air pollutants and in BGN per sq.m for soil pollutants. It should be noted that the pecuniary sanction under the Ordinance cannot be set out beyond the limits, established in the Environmental Protection Act ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values, Chapter III, Annexes***		

*ELVs: Emission Limit Values

Table 2.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Bulgaria*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Operating a new or existing installation which falls under Ordinance No. 7 without an integrated permit (Article 117 of the EPA) or authorisation by the Minister of Environment and Water. ***CAAA , Article 9a***	If the installation operates without integrated permit Article 162 of EPA, applies. Pecuniary sanction to the amount of 100 to 6,000 BGN for individuals and 1000 to 20,000 BGN for legal persons and sole traders. For repeated infringements, the sanction is two-fold. For minor infringements committed by individuals, the fine is 100 BGN. ***Environmental Protection Act, Article 162*** However, there is no sanction for violation of Article 9a of CAAA. Hence, there is no sanction foreseen in case of a plant, which falls under the VOC Directive but not the IPPC Directive.	Catch-all provision of Article 352 of the Criminal Code applies.	Catch-all provision of Article 352 of the Criminal Code applies.
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or	Infringement or non-compliance with the following requirements: Obligation to comply with the ELVs which is laid down in ***CAAA - Article 9a.***	Any person who does not comply with the requirements of Ordinance No 7 of 2003 for Emission Limit Values of Volatile Organic Compounds Emitted into the Air as a Result of the Use of		

mandatory ELVs		Organic Solvents in Certain Installations, or with the emission values determined in an integrated permit pursuant to the Ordinance thereto, shall be fined:		
	Obligation of the operator (sole trader or legal entity) to comply with the ELVs set in the permit or integrated permit. ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values, Article 1***	- For non-compliance with the emission limit values for VOCs – in accordance with the Ordinance for the Procedure for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values (SG 69/2003); ***Article 34 f, point 1 CAAA***		
	Obligation to demonstrate compliance to the satisfaction of the CA with ELVs in waste gases, fugitive emission values & total ELVs ***Ordinance No7 – Article 20***	Pecuniary sanction is imposed, calculated on the basis of the single amount of the penalty for each pollutant (as laid down in Tables), the total quantity of the pollutants over the ELV and the duration of the violation.		
	Obligation for the operator to notify CA of non-compliance and take measures to ensure that compliance is restored within the shortest possible time. ***Ordinance No 7 – Article 27***	There are formulas in the Ordinance on the basis of which the sanction for each case is calculated. The single amount of the pollutants is given in BGN per kg for water and air pollutants and in BGN per sq.m for soil pollutants. ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values, Chapter III, Annexes***		
	Obligation to comply with the limit values for fugitive emissions, total emission values or target values for total emissions. ***Article 34 f, point 2 CAAA***	Depending on the activities categories is sanctioned with fine from 5,000 to 15,000 BNG. ***Article 34 f, point 2 CAAA*** Fine of 15,000 BGN;		

	Obligation to notify the control body for exceeding the relevant threshold values for lower consumption of solvents. ***Article 34 f, point 3 CAAA*** Obligation of the operators without integrated permits to submit an annual plan for solvent managements set out in Article 20, para. 3 of the Ordinance and any other additional information requested and to achieve compliance with Article 20, para. 1 and 2 and article 22 of the Ordinance. ***Article 34 f, point 4 CAAA***	***Article 34 f, point 3 CAAA*** Fine of 15,000 BGN; ***Article 34 f, point 4 CAAA*** For repeated infringements, the sanction is two-fold. ***Clean Air Act Article 34 (k)***		

Table 22.3 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Bulgaria*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes in the operation of the installation without notification. ***Environmental Protection Act, Article 125(1)***	A pecuniary sanction for the operator of the installation, both legal person or sole trader, of 10,000 to 100,000 BGN ***Environmental Protection Act, Article 164 (1)***		
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the conditions of the integrated permit for the operation of the installation. ***Article 125(2), point 2 EPA*** Obligation of the operator (sole trader or legal entity) to comply with the ELVs set in the permit or integrated permit. ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values, Article 1***	A pecuniary sanction for the operator of the installation, both legal person or sole trader, of 10,000 to 100,000 BGN ***Environmental Protection Act, Article 164 (1)*** Pecuniary sanction is imposed, calculated on the basis of the single amount of the penalty for each pollutant (as laid down in Tables), the total quantity of the pollutants over the ELV and the duration of the violation. There are formulas in the Ordinance on the basis of which the sanction for each case is calculated. The single amount of the pollutants is given in BGN per kg for air pollutants. ***Ordinance on the Procedures for Determining and Imposing Sanctions***	Pollution of air, water or soil, which renders it dangerous for the humans, animals, and plants or un-fit for use for cultural, health, agricultural and other economic purposes. ***Criminal Code, Article 352*** An official who allows exploitation of a power plant without the necessary treatment facilities is punishable under the ***Article 353 of the Criminal Code***. The same is envisaged for the official, responsible for the construction and proper exploitation of treatment facilities, who didn't fulfils his tasks so that they could not take effect (completely or partly).	In cases of intentional pollution - imprisonment of up to 5 years and a fine of 100 BGN to 5,000. In cases of negligence the punishment is probation or fine, between 100 and 300 BGN. In minor cases the punishment is fine up to 300 BGN, imposed by administrative order. ***Criminal Code, Article 352*** In cases of intentional crime - imprisonment up to 3 years and a fine of up to BGN 3,000 . In case of negligence - probation or a fine of 100 to 300 BGN.

		for Harming or Polluting the Environment over the limit values, Chapter III, Annexes		In minor cases the penalty is fine from 100 to 300 BGN.
	Obligation to discharge waste gases in a controlled fashion. ***Article 11 CAAA***	Uncontrolled emission discharge, when its restriction is possible is subject to fine of 500 to 5,000 BGN. ***Article 35, CAAA***		
	Obligation to carry out emission control and regular check-ups and other measurements to assess compliance with the emission standards under the permit. ***Ordinance No10, Article 24***	(1) To natural persons are imposed fines, while to legal entities – pecuniary sanctions of 100 to 2,000 BGN when they do not perform the envisaged by law emission control or regular check-ups and do not draw up and ensure implementation of a programme for the technical maintenance of the abatement equipment for the compliance with the emission standards under the permit.		
	Obligation to perform emission control or regular check-ups and to draw up and ensure implementation of a programme for the technical maintenance of the abatement equipment for the compliance with the emission standards under the permit. ***CAAA Article 36 (1)***	(2) In case of repeated violation under paragraph (1), the fine, respectively the pecuniary sanction, is from 200 to 4000 BGN. ***CAAA Article 36 (1)***		
	Obligation to ensure measurement of emissions in accordance with the procedure and measurement method and to fulfil the prescriptions of the control bodies, as well as an order of the mayor of the municipality	(1) The manager of a facility or activity with a stationary source, who does not ensure measurement of emissions in accordance with the procedure and measurement method and does not fulfil the prescriptions of the control bodies, as well as an order of the mayor of the municipality in the case of article 30 (3), is subject to a fine of 100 to 500 BGN.		
	Obligation fulfil requirements under article 20 (2) of the CAAA for the	(2) In case of a repeated violation under paragraph (1) the fine is 200 to 1,000		

	construction of a monitoring system for the source and the quality of the air in the area of the facility.	BGN. (3) The manager of a facility – major source of pollution of the ambient air, who does not fulfil his obligations under article 20 (2) for the construction of a monitoring system for the source and the quality of the air in the area of the facility, if not subject to a more severe penalty, is subject to a fine of 100 to 1,000 BGN. ***CAAA Article 41(1), (2) and (3)***		

Table 2.4 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Bulgaria*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Treating and/or transporting waste without holding a permit or registration document where such a permit or document is required. ***WMA Article 106 (3) point 2***	A pecuniary sanction to the amount of minimum BGN 7,000 and maximum BGN 20,000 shall be imposed on any sole trader or legal person who or which breaches Article106(3) ***WMA Article 106 (3)*** In the event of a repeated violation under Paragraph (3), to the amount of minimum BGN 14,000 to maximum BGN 40,000; ***WMA Article 106 (4) point 3***	Catch-all provision of Article 352 of the Criminal Code applies. Pollution of air, water or soil, which renders it dangerous for the humans, animals, and plants or un-fit for use for cultural, health, agricultural and other economic purposes. ***Criminal Code, Article 352***	Catch-all provision of Article 352 of the Criminal Code applies. In cases of intentional pollution - imprisonment of up to 5 years and a fine of 100 BGN to 5,000. In cases of negligence the punishment is probation or fine, between 100 and 300 BGN. In minor cases the sanction is a fine up to 300 BGN, imposed by administrative order. ***Criminal Code, Article 352***
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to include a description of specific measures, specified in Article 3 (4), (5) and Article 4 of Ordinance 6 in the application for permit. The CA will not issue the permit or revoke the issued permit if the data in the submitted application is false. ***WMA, Article 42 (3), point 3 and Article 47 (1), point 1.*** In the case of revoked permit the applicant has no right to submit application for a period of 1 year. ***WMA, Article 47 (2)***	Any legal entity or sole trader, who submits false information, shall be punished with pecuniary sanction from 2,000 to 6,000 BGN. ***WMA, Article 106 (1), point 7*** In case of repeated violation two-fold sanction is envisaged. ***WMA, Article106 (4)***		
Obligation to notify the competent authority of any changes in the operation of an	Carrying out substantiation changes in the operation of an installation without notification. In cases of substantial changes in the operation of the installation the permit should be	Any legal entity or sole trader, who does not provide any information, required under WMA, shall be punished with pecuniary sanction from 2,000 to 6,000 BGN.		

installation	amended/ or supplemented. ***WMA Article 45 (1)*** in connection with ***Article 6 of Ordinance 6.***	***WMA, Article 106 (1), point 6*** In case of repeated violation two-fold sanction is envisaged. ***WMA, Article 106 (4)***		
Obligation to comply with the conditions set in the permits or mandatory ELV's	Infringement or non-compliance with the following requirement: Obligation of the legal persons and sole traders to comply with the conditions of the issued permit ***WMA - Article 106 (2), point 4*** Obligation to construct and/or operate a waste incineration facility in accordance (a) with the technical requirements upon construction of facilities regarding the slag and bottom ashes Total Organic Carbon (TOC) content, the temperature in the combustion chamber, the residence time and the oxygen content of the exhaust gas upon incineration of liquid waste; (b) with the requirement of ensuring the measurements are performed to monitor the emissions of harmful substances and the operational parameters. ***WMA Article 107 (1), 1 (a) and (b)*** Obligation to ensure that emission limit of pollutants in the air, are not exceeded during the operation of incineration of waste. Therefore failure to comply with this requirement is regarded as an offence. ***Article 107(4) WMA*** Obligation of the operator (sole trader or legal entity) to comply with the ELVs set in the permit or integrated permit. ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the***	Sanction of 3,000 to 10,000 BGN a sole proprietor or legal person For repeated violation sanction from 6,000 to 20,000 BGN ***Article 106 (2), point 4 and (4) WMA*** Sanction of 7,000 to 20,000 BGN a sole proprietor or legal person For repeated violation sanction from 14,000 to 40,000 BGN ***Article 107(1) and (2) WMA*** *Note: Article 107(4) WMA refers to the sanctions set up by the Environmental Protection Act – regarding the ELVs, provisions of Article 69 of EPA and the Ordinance for Sanctions apply.* Pecuniary sanction is imposed, calculated on the basis of the single amount of the penalty for each pollutant (as laid down in Tables), the total quantity of the pollutants over the ELV and the duration of the violation. There are formulas in the Ordinance on the basis of which the sanction for each case is calculated. The single amount of the pollutants is given in BGN per kg for water and air pollutants and in BGN per sq.m for soil pollutants. ***Ordinance on the Procedures for Determining and Imposing Sanctions for Harming or Polluting the Environment over the limit values, Chapter III, Annexes***	Pollution of air, water or soil, which renders it dangerous for the humans, animals, and plants or un-fit for use for cultural, health, agricultural and other economic purposes. ***Criminal Code, Article 352***	In cases of intentional pollution - imprisonment of up to 5 years and a fine of 100 BGN to 5,000. In cases of negligence the punishment is probation or fine, between 100 and 300 BGN. In minor cases the punishment is fine up to 300 BGN, imposed by administrative order. ***Criminal Code, Article 352***

	Environment over the limit values, Article 1			

Annex IV – Cyprus

CYPRUS

1. Overview of penalties related to legislation on industrial installations

In Cyprus, the law relating to industrial installations is found in a number of different acts which transpose the four Directives relevant to this study. The Integrated Pollution Prevention and Control Law of 2003 (Law No. 56(I)/2003) as amended, is a harmonised version of Cyprus' laws on the environment. This one law covers all licensing obligations under the four Directives.

Section 3 of Law No. 56(I)/2003 provides that the provisions of this Law apply as *complimentary provisions* to the Atmospheric Pollution Control Law (L. No.187 (I)/2002) and to the Water Pollution Control Law of 2002 (L. No. 106(I)/2002). As a result, it may be inferred that the provisions of these 3 Laws *should be read together as a whole* when dealing with licensing and other obligations under the four directives.

Law No. 56(I)/2003 lays down the requirements for the licensing of industrial installations. Section 3 of Law No. 56(I)/2003 also provides that the "*Scope of application of this Law*" is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole.

However, this Law does not provide for any offences or penalties per se. According to section 7 of Law No. 56(I)/2003 the Council of Ministers may issue Regulations for the optimal implementation of the Law including Regulations prescribing offences and penalties for breaches of the Law or the general or specific terms imposed by relevant permits. However, no such regulations have been adopted.

The Cyprus legal system is based upon the common law system. Administrative sanctions are those imposed by the competent authority. Such administrative sanctions are not criminal in nature but they are actions of the administration subject to judicial review by the Supreme Court in its administrative jurisdiction.

According to section 16 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002), the Minister (the competent authority), where he deems justified, for reasons relating to the protection of public health, public safety or protection of the environment, has the power to:

(a) Recall a licence;
(b) Cancel or amend any licence terms;
(c) Add a new term in the licence, and
(d) Shorten the term of validity of the licence.

According to section 21 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002), the Council of Ministers may issue Regulations prescribing the terms of operation of any category of unauthorised installations (including technical specifications, level of pollution, serving notices by Inspectors to persons operating installations, etc). The Regulations may provide for the maximum level of sentences, imprisonment not exceeding 1 year or fines not exceeding CYP 3000 (Euros 5,126)[51] or both, imposing obligations for the provision of information by operators, etc. In the event that the Council of Ministers does not issue such Regulations, the Minister may serve a notice to any non-authorised installation the operation of which causes or is liable to cause serious atmospheric pollution, prescribing the measures to be taken within a prescribed time period. However, as stated

[51] 1 EUR = 0.585274 CYP (as at 14.12.2010).

above, no such Regulations have been adopted therefore currently no administrative fines may be imposed.

According to section 21(5) of the Atmospheric Pollution Control Law, in the event that the person responsible for a non-authorised installation fails to take the measures referred to in the notice, then an Inspector shall send a notice of prohibition instructing the operator to cease operating the installation.

According to section 22 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002), where an Inspector ascertains that there was a violation of the licence terms, it may serve a notice on the operator, informing them of the violation and instructing them to stop the breach within a prescribed time period. If the person responsible does not comply with the notice within the prescribed time limit, the Inspector may send a second (final) notice setting out the measures to be taken for lifting the violation. Section 26 provides that it shall be a criminal offence if a person fails to comply with any of the requirements under that section.

As opposed to administrative sanctions described in the previous question, criminal sanctions are those imposed by the Courts acting within the framework of their criminal jurisdiction. Such criminal sanctions are subject to appeal before the Court of Appeal. In addition to the criminal sanctions described below, there are only a few criminal provisions on environmental offences under the Criminal Code, Cap. 154, namely the criminal offence of common nuisance (Section 186 – 1 year imprisonment), water pollution (Section 191 – imprisonment up to 2 years and/or fine up to 1500 CYP) and the pollution of the atmosphere (Section 192 - imprisonment up to 2 years and/or fine up to 1500 CYP).

Where atmospheric pollution is concerned, the enforcement provisions are found in Sections 15 and 26 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002) as amended. These sections consist of a catch-all provision determining the offences related to all atmospheric pollution by industrial installations,[52] and as explained above, they must be read in conjunction with Law No. 56(I)/2003.

Section 15 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002) provides that every person operating or knowingly allows the operation of an authorised installation:

(a) Which has not obtained a licence by the Minister, or
(b) At a location other than that prescribed in its licence, or
(c) In a manner which is not in accordance with the terms of operation attached to the licence,

shall be guilty of a criminal offence and shall be liable to the sanctions referred to in section 26(2). Namely, in the event of breaches referred to above, the penalty will be imprisonment up to one year or a fine of up to 20,000 Cypriot Pounds (Euros 34,172). No distinction is made in section 15 of L.No.187 (I)/2002, between natural or legal persons. Section 15 simply states that any person is guilty of a criminal offence if he or she breaches the provisions of this section.

Section 26 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002) sets out the following with regards to criminal offences and penalties (our translation):

"Any person shall be deemed to have committed a criminal offence if:
(a) It obstructs an Inspector from carrying out its duties or exercise of its powers;
(b) It obstructs any police officer or qualified person or other person who entered inside an installation together with an Inspector for the purpose of assisting the Inspector;

[52] The Technical Committee for the Protection of the Environment, which is chaired by the representative of the Department of Labour examines applications and prescribes specific operating conditions and emission limit values. Upon the Technical Committee for the Protection of the Environment's proposals, the relevant Air Emission Permits are issued.

(c) Fails to comply with any instruction given lawfully thereto by an Inspector;
(d) Fails to present any book or document which he has a duty to supply when requested within reasonable time;
(e) Fails to give within reasonable time information lawfully requested by an Inspector or gives untrue or wrong or incomplete information;
(f) Fails to provide safe access to any installations; and
(g) Fails to give an Inspector any assistance for carrying out tests, measurements, inspections or examinations.

Section 26 of L.No.187 (I)/2002, provides criminal sanctions for breaches of any of the requirements set out in L.No.187 (I)/2002. No distinction is made in L.No.187 (I)/2002, between natural or legal persons. The penalty for a breach is imprisonment up to one year or a fine of up to 20,000 Cypriot Pounds (Euros 34,172). L. No.187 (I)/2002) further provides for a detailed list of criminal offences and sanctions in relation to, inter alia, obstructing investigating officers and failure to provide information to inspectors. This Law provides for the same level of penalties as mentioned above.

According to section 28 of the Atmospheric Pollution Control Law of 2002 (L.No.187 (I)/2002), in the event that a person is sentenced for a criminal offence for violations of sections 11 15, 20(4) or 22(5) (failure to comply with an administrative notice) or any regulations issued on the basis of sections 9 (sets out a list of issues entitling the issuing of Regulations) or 21 of the Law, the Court may in addition to the imposition of any sentencing, order the immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate.

It should be noted that Section 11 imposes certain obligations on an operator, namely an obligation to (a) keep the licence terms, (b) inform the Minister of results of monitoring emission levels if required by licence terms, (c) inform Minister immediately of each event or accident affecting the environment and (d) providing Inspectors facilities for carrying out inspections of installations, sample taking and collection of data for carrying out their duties.), Failure of an operator to comply with these obligations will result in the imposition of sanctions. Section 11 should be read together with Section 15 which imposes an obligation to keep the licence terms and Section 26 which imposes sanctions for failure to comply with obligations regarding the carrying out of Inspections.

Section 20(4) provides that it is an offence for an operator of an authorised installation to operate same whilst making additions, modifications or other important changes which may have additional important negative effects on the atmosphere before being granted a new authorisation for these or before being given a written confirmation by the Minister.

According to section 27 of the Atmospheric Pollution Control Law of 2002, for violations of sections 11, 15, 20(4) or 22(5) or of any regulations issued on the basis of section 21 of the Law, the Court may issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. If a person against whom a Court order was issued fails to comply with the Court order, such person shall be guilty of a criminal offence and shall be liable to imprisonment for a period of up to 2 years or to a fine not exceeding 20,000 CYP (Euros 34,172) or both.

Finally, according to section 21(6) of the Law, a person shall be liable for an offence in the event that he refuses or fails to comply with a notice of prohibition as well as for failure to comply within reasonable time or within the prescribed time limit with the notice of the Minister or the Inspector for fixing the non-compliant act.

It should be noted that numerous regulations and orders have been issued on the basis of the aforementioned Laws which enable the implementation of the provisions of the law on industrial installations into practice. This secondary legislation provides that in the event of violation of the

provisions of the said secondary legislation, then the provisions of the Law regarding offences and penalties will apply. [53] These regulations include:

- Reg. 170/2004 - Atmospheric Pollution Control (Non-authorised Installations) Regulations of 2004. These Regulations are issued on the basis of L.No.187 (I)/2002, in order to facilitate the better implementation of certain provisions of that Law.
- Reg. 195/2004 - Quality of Atmospheric Air (Ozone and Atmospheric Air) Regulations of 2004. This Regulation was specifically adopted for implementing the provisions of Directive 2001/80/EC.
- Reg. 73/2003 - Atmospheric Pollution Control Regulations of 2003 - specifically adopted for implementing the provisions of Directive 1999/13/EC.

Where water pollution is concerned, the Water Pollution Control Law of 2002 (L. No. 106(I)/2002) as amended does not specifically mention the four Directives related to this study, but instead refers to older versions, including Council Directive 96/61/EEC of 24 September 1996 concerning integrated pollution prevention and control. For this purpose, the tables below do not mention offences concerning water pollution. The enforcement provisions are catch-all provisions and are found in section 6 of L. No. 106(I)/2002. No distinction is made between natural or legal persons. The penalty for violation of the provisions of the Law concerning deliberate pollution is that of imprisonment of up to 3 years or a fine of up to 50,000 Cypriot Pounds (Euros 85,430). For offences regarding the violation of permit obligations, the relevant sanctions include imprisonment for a period of up to 6 months or fines of up to 1,000 Cypriot Pounds (Euros 1,710).

According to Section 2 of Law No. 56(I)/2003, the Competent Authority for the issuing of a licence or the operation of installations is the Minister of Agriculture, Natural Resources and the Environment who is competent for the issuing of a licence and the control of an installation.

According to the Atmospheric Pollution Control Law of 2002 the Minister of Labour and Social Insurance is the authority competent for ensuring compliance with the terms of operation of authorised installations with regards to the emissions, as well as with regards to the operation of non-authorised installations.

Under the Water Pollution Control Law of 2002 (L. No. 106(I)/2002), the competent Minister for implementing the provisions of this Law and for taking the necessary measures is the Minister of Agriculture, Natural Resources and the Environment.

According to the Atmospheric Pollution Control Law of 2002 and the Water Pollution Control Law of 2002 (L. No. 106(I)/2002), the term "operator" includes *any natural person or legal entity* who operates or controls the installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated (same text as Article 2.13 of Directive 2008/1/EC and Article 2.6 of Directive 1999/13/EC). In addition, under the relevant sections referring to sanctions and criminal offences, the aforementioned laws provide for "any person", a term which may be inferred to mean both natural persons and legal entities as it relates to operators.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Cyprus

The table below has been compiled on the basis of the requirements set up by the national legislation.

[53] Reg. 170/2004 provides for additional criminal sanctions. In any event Regulations are secondary acts and the Law will always apply in any event.

This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Cyprus
IPPC Directive	
Catch-all	C
4	X
5	-
6	X*
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	X
4	X*
5 (2)(a)	X
5 (2)(b)	X
5 (4)	-
5 (5)	-
5 (6)	-
5 (8)	-
5 (9)	-
5 (10)	-
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	-
4 (4)	-
5	-
7 (1)	X*
9	-
10	-
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	-
4 (8)	X

5 (1)	-
5 (2), (3) & (4)	-
6	-
7	X
8 (1)	-
8 (4)	-
8 (5)	-
8 (7)	-
9	-
10 (1)	-
10 (2)	-
11	X
12 (2)	-
13 (2)	-
13 (3)	-
13 (4)	-

* indicates that only part of the article is sanctioned

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Cyprus. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.23 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Cyprus*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	It is an offence for any person who operates or knowingly allows the operation of an authorised installation: (a) Who has not obtained a licence by the Minister, or (b) At a location other than that prescribed in its licence. ***Section 15(a) and (b) L. No. 187(I)/2002*** Operating an authorised installation whilst making additions, modifications or other important changes (which may have additional important negative effects on the atmosphere) before being granted a new authorisation for these or before being given a written confirmation by the Minister. ***Section 20(4) L.No.187(I)/2002*** Emission of pollutants into the atmosphere by non-authorised installations, violation of terms of operation, burning oil, etc. ***Section 8 of Reg. No.170/2004***	Imprisonment up to 1 year or a fine of 34,172 Euros (£20,000). ***Sections 15 & s.26 L.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002*** A fine of up to (3,000 Cypriot pounds (Euro 5,125) and/or imprisonment of up to 1 year. ***Section 8 of Reg. No.170/2004***

Obligation to supply information for application for permits	N/A	N/A	Failure to give assistance to an Inspector for carrying out tests, measurements, inspections or examinations (also may include obligation to give information). ***Section 26(g) of L.No.187 (I)/2002***[54]	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Sections 15 & 26 L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	Failure of operator to comply with the following obligation: (c) inform Minister immediately of each event or accident affecting the environment. ***Section 11(c) of L.No.187 (I)/2002*** It is an offence for an operator of an authorised installation to operate same whilst making additions, modifications or other important changes which may have additional important negative effects on the atmosphere before being	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000) ***Sections 15 & 26 L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem

[54] This offence partly only partly covers the obligation.

			granted a new authorisation for these or before being given a written confirmation by the Minister. ***Section 20(4) of L.No.187 (I)/2002*** Obligation of an operator to submit new application for obtaining authorisation before making changes to existing installation (applies for non-essential changes to operation of installations)/ ***Section 20A L.No.187 (I)/2002*** Obligation to file application for essential change of operation of installations. ***Section 20B L.No.187 (I)/2002***	appropriate ***Section 28 of L.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A	N/A	Failure of the operator to comply with the following obligations: (a) keep the licence terms, (b) inform the Minister of results of monitoring emission levels if required by licence terms, (d) provide Inspectors with any facilities for carrying out inspections of installations, sample taking and collection of data for carrying out their duties. ***Section 11(a), (b) and (d) L.No.187(I)/2002*** It is an offence for any person who operates or knowingly allows the operation of an authorised installation in a manner which is not in accordance with the terms of operation attached to the licence. ***Section 15(c) L.No.187(I)/2002*** For large installations: breach of licence terms, emission limits, etc. According to s.23, failure to comply will incur the sanctions of Section 26 of L.187	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000) ***Sections 15 & 26 L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000) ***Section 27 of L.No.187(I)/2002***

			(I)/2002. ***Section 23 of Reg. No. 195/2004***	According to s.23, failure to comply will incur the sanctions of Section 26 of L.187 (I)/2002.
			Emission of pollutants into the atmosphere by non-authorised installations, and violation of terms of operation, burning oil, etc. ***Section 8 of Reg. No. 170/2004***	A fine of up to 3,000 Cypriot pounds (Euros 5,125) and/or imprisonment of up to 1 year. ***Section 8 of Reg. No. 170/2004***

*ELVs: Emission Limit Values

Table 24.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Cyprus*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A	N/A	It is an offence for any person who operates or knowingly allows the operation of an authorised installation: (a) Who has not obtained a licence by the Minister, or (b) At a location other than that prescribed in its licence, or ***Section 15(a) and (b) L. No. 187(I)/2002*** Operating an authorised installation whilst making additions, modifications or other important changes (which may have additional important negative effects on the atmosphere) before being granted a new authorisation for these or before being given a written confirmation by the Minister. ***Section 20(4) L.No.187(I)/2002*** Emission of pollutants into the atmosphere by non-authorised installations, violation of terms of operation, burning oil, etc. ***Section 8 of Reg. No. 170/2004***	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Sections 15 & 26 L.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L. No. 187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002*** A fine of up to Euros 34,172 (3,000 Cypriot pounds) and/or imprisonment up to 1 year. ***Section 8 of Reg.No. 170/2004***
Obligation to supply information for application for permits	N/A	N/A	Failure to give assistance to an Inspector for carrying out tests, measurements, inspections or examinations – Also may include	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Sections 15 & 26 of L.No.187(I)/2002***

			obligation to give information. ***Section 26(g) of L.No.187 (I)/2002***	Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	Failure of operator to comply with the following obligation (c) inform Minister immediately of each event or accident affecting the environment and ***Section 11(c) of L.No.187 (I)/2002*** It is an offence for an operator of an authorised installation to operate same whilst making additions, modifications or other important changes which may have additional important negative effects on the atmosphere before being granted a new authorisation for these or before being given a written confirmation by the Minister. ***Section 20(4) of L.No.187 (I)/2002*** Obligation of operator to submit new application for obtaining authorisation before making changes to existing	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000) ***Sections 15 & s.26 L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal

			installation (applies for non-essential changes to operation of installations). ***Section 20A of L.No.187 (I)/2002*** Obligation to file application for essential change of operation of installations. ***Section 20B of L.No.187 (I)/2002***	action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	N/A	N/A	Failure of the operator to comply with the following obligations: (a) keep the licence terms, (b) inform the Minister of results of monitoring emission levels if required by licence terms, (d) providing Inspectors facilities for carrying out inspections of installations, sample taking and collection of data for carrying out their duties. ***Section 11(a), (b) and (d) of L.No.187(I)/2002*** It is an offence for any person who operates or knowingly allows the operation of an authorised installation: In a manner which is not in accordance with the terms of operation attached to the licence. ***Section 15(c) of L.No.187(I)/2002*** For large installations: breach of licence terms, emission limits, etc. According to s.23, failure to comply will incur the sanctions of Section 26 of L.187 (I)/2002. ***Section 23 of Reg.No. 195/2004*** Emission of pollutants into the atmosphere by non-authorised installations, violation of terms of operation, burning oil, etc. ***Section 8 of Reg .No. 170/2004***	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Section 15 & s.26 of L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002*** A fine of up to Euros 34,172 (3,000 Cypriot pounds) and/or imprisonment up to 1 year. ***Section 8 of Reg.No. 170/2004***

Table 2.25 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Cyprus*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations			It is an offence for any person who operates or knowingly allows the operation of an authorised installation: (a) Who has not obtained a licence by the Minister, or (b) At a location other than that prescribed in its licence, or ***Section 15 (a) and (b) of L.No.187(I)/2002*** Operating an authorised installation whilst making additions, modifications or other important changes (which may have additional important negative effects on the atmosphere)before being granted a new authorisation for these or before being given a written confirmation by the Minister. ***Section 20(4) of L.No.187(I)/2002*** Emission of pollutants into the atmosphere by non-authorised installations, violation of terms of operation, burning oil, etc. ***Section 8 of Reg. No.170/2004***	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Section 15 & s.26 of L.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002*** A fine of up to Euros 34,172 (3,000 Cypriot pounds) and/or imprisonment up to 1 year. ***Section 8 of Reg. No. 170/2004***
Obligation to supply information for application for permits			Failure to give assistance to an Inspector for carrying out tests, measurements, inspections or examinations – Also may include	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000) ***Sections 15 & 26 of L.No.187(I)/2002***

			obligation to give information. ***Section 26(g) of L.No.187 (I)/2002***	Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to notify the competent authority of any changes in the operation of an installation	N/A		Failure of operator to comply with the following obligation: (c) inform Minister immediately of each event or accident affecting the environment and ***Section 11(c) of L.No.187 (I)/2002*** Obligation of operator to submit new application for obtaining authorisation before making changes to existing installation (applies for non essential changes to operation of installations). ***Section 20A of L.No.187 (I)/2002*** Obligation to file application for essential change of operation of installations. ***Section 20B of L.No.187 (I)/2002*** Failure to give assistance to an Inspector for carrying out tests, measurements, inspections or	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Sections 15 & 26 L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal

			examinations – also may include obligation to give information. ***Section 26(g) of L.No.187 (I)/2002***	action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A		It is an offence for any person who operates or knowingly allows the operation of an authorised installation in a manner which is not in accordance with the terms of operation attached to the licence. ***Section 15(c) of L.No.187(I)/2002*** Failure of operator to comply with the following obligations: (a) keep the licence terms; (b) inform the Minister of results of monitoring emission levels if required by licence terms; (d) inform Minister immediately of each event or accident affecting the environment. ***Section 11(a), (b) and (d) of L.No.187(I)/2002*** For large installations: breach of licence terms, emission limits, etc. According to s.23, failure to comply will incur the sanctions of Section 26 of L.187 (I)/2002. ***Section 23 of Reg. No. 195/2004*** Emission of pollutants into the atmosphere by non-authorised installations, violation ***Section 8 of Reg. No. 170/2004***	Imprisonment for up to 1 year or a fine of up to Euros 34,172 (£20,000). ***Sections 15 & 26 of L.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002*** A fine of up to Euros 34,172 (3,000 Cypriot pounds) and/or imprisonment up to 1 year. ***Section 8 of Reg. No. 170/2004***

Table 2.26 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Cyprus*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	It is an offence for any person who operates or knowingly allows the operation of an authorised installation: (a) Who has not obtained a licence by the Minister, or (b) At a location other than that prescribed in its licence ***Section 15 (a) and (b) L.187(I)/2002*** Operating an authorised installation whilst making additions, modifications or other important changes (which may have additional important negative effects on the atmosphere)before being granted a new authorisation for these or before being given a written confirmation by the Minister. ***Section 20(4) L.No.187(I)/2002*** Emission of pollutants into the atmosphere by non-authorised installations, violation. ***Section 8 of Reg. No. 170/2004***	Imprisonment for up to 1 year or a fine of Euros 34,172 (£20,000). ***Section 15 & s.26 L.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002*** A fine of up to Euros 34,172 (3,000 Cypriot pounds) and/or imprisonment up to 1 year. ***Section 8 of Reg. No. 170/2004***
Obligation to supply information for application for permits	N/A	N/A	Failure to give assistance to an Inspector for carrying out tests, measurements, inspections or examinations (also may include obligation to give information).	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000) ***Sections 15 & 26 L.No.187(I)/2002*** Court may also:

			Section 26(g) of L.No.187 (I)/2002	Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to notify the competent authority of any changes in the operation of an installation			Failure of operator to comply with the following obligation: (c) inform Minister immediately of each event or accident affecting the environment and ***Section 11(c) of L.No.187 (I)/2002*** Obligation of operator to submit new application for obtaining authorisation before making changes to existing installation (applies for non-essential changes to operation of installations). ***Section 20A of L.No.187 (I)/2002*** Obligation to file application for essential change of operation of installations. ***Section 20B of L.No.187 (I)/2002***	Imprisonment up to 1 year or a fine of Euros 34,172 (£20,000). ***Section 15 & s.26 L.No.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure

				to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***
Obligation to comply with the conditions set in the permits or mandatory ELVs	N/A	N/A	Failure of operator to comply with the following obligations: (a) keep the licence terms; (b) inform the Minister of results of monitoring emission levels if required by licence terms; (d) inform Minister immediately of each event or accident affecting the environment. ***Section 11 (a),(b) and (d) of L.No.187(I)/2002*** It is an offence for any person who operates or knowingly allows the operation of an authorised installation in a manner which is not in accordance with the terms of operation attached to the licence. ***Section 15(c) of L.No.187(I)/2002*** Obligation of operator to submit new application for obtaining authorisation before making changes to existing installation (applies for non-essential changes to operation of installations). ***Section 20A of L.No.187 (I)/2002*** Obligation to file application for essential change of operation of installations. ***Section 20B of L.No.187 (I)/2002*** For large installations: breach of licence terms, emission limits, etc. According to s.23, failure to comply will incur the sanctions of Section 26 of L.187 (I)/2002. ***Section 23 of Reg. No. 195/2004***	Imprisonment for up to 1 year or a fine of up to Euros 34,172 (£20,000). ***Sections 15 and 26 of L.187(I)/2002*** Court may also: Order immediate termination or suspension of the operation of a business to which the installation belongs for as long and under such terms as the Court may deem appropriate. ***Section 28 of L.No.187(I)/2002*** *or* Issue an interim order prohibiting the continuation or repetition of a criminal action until the issuing of a final judgement of the case. For violation of interim order for failure to obtain permit: Imprisonment up to 2 years or a fine Euros 34,172 (£20,000). ***Section 27 of L.No.187(I)/2002***

			Emission of pollutants into the atmosphere by non-authorised installations, violation . ***Section 8 of Reg. No. 170/2004***	A fine of up to Euros 34,172 (3,000 Cypriot pounds) and/or imprisonment up to 1 year. ***Section 8 of Reg. No. 170/2004***

Annex V – Czech Republic

CZECH REPUBLIC

1. Overview of penalties related to legislation on industrial installations[55]

In the Czech Republic, the four Directives on industrial installations are transposed by a variety of legal acts and ministerial decrees. Obligations and sanctions for legal and natural persons are set out in laws (acts). By-laws (including government regulations and decrees of the Ministry of the Environment) can only lay down details of these obligations (for example the monitoring of emissions, requirements of applications or reporting requirements). The reason for this is that all acts must be adopted by the Parliament whereas by-laws are only issued by the executive bodies. The main acts and by-laws for each of the Directives are as follows:

IPPC Directive: Act No. 76/2002 Coll. on integrated pollution prevention and control, integrated pollution register and on amendment of some laws (Act on Integrated Prevention), as amended.[56]

VOC Directive: Act No. 86/2002 Coll. on air protection and amendment of some laws, as amended;[57] Decree of the Ministry of the Environment No. 337/2010 Coll. (Decree No. 355/2002) laying down emission limits and other conditions of operation of other stationary sources of air pollution emitting or using volatile organic compounds and conditions of handling products with VOCs.

LCP Directive: Act No. 86/2002 Coll. on air protection and amendment of some laws, as amended; Government Regulation No. 146/2007 Coll. (repealing Government Regulation No.352/2002 Coll.) on emission limits and other conditions for the operation of stationary combustion sources of air pollution, as amended by Government Regulation No. 476/2009 Coll.

Waste Incineration Directive:[58] Act No. 86/2002 Coll. on air protection and amendment of some laws, as amended; Act No. 185/2001 Coll. on waste management, as amended;[59]Government Regulation No. 354/2002 Coll. laying down emission limits and other conditions for waste incineration as amended by Government Regulation No. 206/2006 Coll.; Decree No. 205/2009 Coll. on obtaining information on the emission from stationary sources and to specify other provisions of Act No. 86/2002 Coll.

The main sources of environmental law in the Czech Republic are found in Act No.17/1992 Coll. on Environmental Protection and specific horizontal and sectoral acts.[60] A typical horizontal act is the Act on the IPPC (Act No. 76/2002 Coll.). Sectoral acts are those acts relating to particular environmental

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[55] The following studies were used as resources : Measures other than criminal ones in cases where environmental Community Law has not been respected in a few Candidate countries, Criminal Penalties in Candidate Countries Environmental Law
http://ec.europa.eu/environment/legal/crime/studies_en.htm

[56] This Act was amended by the following acts: Act No. 521/2002, Act No. 437/2004., Act No. 695/2004, Act No. 444/2005, Act No. 222/2006, Act No. 25/2008 , Act No. 227/2009, Act No. 281/2009

[57] This Act was amended by the following acts: Act No. 521/2002, Act No.92/2004, Act No. 186/2004 , Act No. 695/2004, Act No.180/2005, Act No. 385/2005, Act No. 444/2005, Act No. 212/2006, Act No. 222/2006, Act No., 230/2006 Sb., Act No. 186/2006, Act No. 180/2007. Act No. 296/2007., Act No. 25/2008, Act No. 37/2008, Act No.124/2008, Act No. 483/2008, Act No. 292/2009, Act No. 223/2009, Act No. 164/2010, Act No. 172/2010, Act No.227/2009, Act No. 281/2009

[58] Waste water is also regulated under Water Act. There is a Government Regulation No. 61/2003 on limit values of pollutants in waste water as a by-law to this Act. In Annex 1 to this regulation, which in Part A sets limits for urban waste water, there is a note on how these limits should be obtained from waste incinerators.

[59] This Act was amended by the following acts : Act No. 477/2001, Act No.76/2002, Act No. 275/2002, Act No. 320/2002, Act No. 188/2004, Act No. 356/2003, Act No.167/2004, Act No. 317/2004, Act No.7/2005, Act No.444/2005, Act No. 222/2006, Act No. 314/2006, Act No.186/2006, Act No. 296/2007, Act No. 25/2008, Act No. 34/2008, Act No. 383/2008 Sb. Act No 9/2009, Act No. 157/2009, Act No. 297/2009, Act No. 291/2009, Act No. 326/2009, Act No. 223/2009 Sb, Act No. 227/2009, Act No. 154/2010, Act No. 281/2009 Sb.

[60] Measures other than criminal ones in cases where environmental Community Law has not been respected in a few Candidate countries
http://ec.europa.eu/environment/legal/crime/studies_en.htm

sectors such as water, soil, air, nature and landscape, and waste management. The different types of environmental liability are laid down in these individual acts. The Czech legal system operates with three main types of environmental liability: administrative, civil[61] and criminal liability.

Administrative liability arises in case of contravention with specific environmental obligations or decisions of the competent authorities. The authorities may impose penalties such as fines or other measures, including withdrawal of a permit, confiscation of goods, restriction or ceasing of the harmful activity, prohibition of the activity, refusal to grant a specific document, obliging the person to restore the environment to an appropriate state, or to provide a remedy for the illegal situation.[62] Sanctions can be imposed on both legal and natural persons. Administrative liability is a strict form of liability, which means that sanctions can be imposed regardless the fault of the perpetrator.

The competent authorities (first instance bodies), include local and/or regional municipalities, the Czech Environmental Inspectorate or other special authority (eg administration of specially protected areas, river basin administration). They have the power to impose certain administrative sanctions. In practice, however, most sanctions for industrial installations fall within the competence and regulatory powers of the Czech Environmental Inspectorate. This body is primarily responsible for ensuring compliance with environmental laws and imposing sanctions (if necessary). Occasionally, sanctions will fall within the competence of a superior permitting body or a body at a higher administrative level. The competences are always laid down in the relevant acts. Administrative decisions of the competent authorities can be appealed before the supervisory authorities. Upon the decision of the perpetrator, these cases can be brought before the administrative courts.

On the basis of a breach of the relevant environmental law provisions, the competent authorities may also impose quasi-criminal sanctions for certain administrative offences committed by natural persons (not legal persons). Quasi-criminal offences constitute a special branch of administrative law, regulated in the Act on Misdemeanours and in specific environmental acts. According to Czech law, specific environmental acts prevail over the application of the Act on Misdemeanours (*lex specialis derogat legi generali*). Admonitions, fine, prohibition of the activity and confiscation of goods can be imposed as quasi-criminal penalties. Administrative and quasi-criminal sanctions can be imposed separately or in conjunction.[63]

In case of serious contravention of specific legal obligations, criminal sanctions can be imposed. According to the Czech law,[64] only natural persons can be criminally liable. However, in case of legal persons, the statutory body (which consists of natural persons) can be subject to prosecution and sanctions. Criminal liability is fault-based.

Administrative sanctions and criminal sanctions can be imposed in conjunction. However, in case of criminal sanction, quasi-criminal sanctions cannot be imposed. Criminal sanctions may include the prohibition of activities, fines and imprisonment.

[61] Civil liability is not subject to the current study.
[62] These penalties are included in the specific acts, which stipulate the related offences.
[63] Measures other than criminal ones in cases where environmental Community Law has not been respected in a few Candidate countries
http://ec.europa.eu/environment/legal/crime/studies_en.htm
[64] A bill on the criminal liability of legal persons has been drafted, but not yet been submitted to the Czech Parliament.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in the Czech Republic

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Czech Republic
IPPC Directive	
Catch-all	-
4	X
5	X
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	-
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (3)	X
4 (4)	X
5	X
7 (1)	X

9	X
10	X
13	X
WI Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Czech Republic. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.27 *Directive 2008/1/EC (IPPC Directive): Types of offences in Czech Republic*[65]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an installation without a valid integrated permit or without a decision on the substantial change of the integrated permit. ***Act No. 76/2002 Coll. on integrated prevention, article 37 (2)***	Fine up to Euros 284,599 (CZK 7,000,000) ***Act No. 76/2002 Coll. on integrated prevention- article 37 (4) (b)***	N/A	N/A
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to contain correct data in the application as incorrect data can influence the granting of the integrated permit. ***Act No. 76/2002 Coll. in integrated prevention- article 37 (1)(b)***	Fine up to Euros 40,656 (CZK 1,000,000) ***Act No. 76/2002 Coll. on integrated prevention- article 37 (4)(a)***	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirements: Obligation to announce changes to the competent authorities. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (1)(a)*** Obligation to submit application for change of the integrated permit in the period given by the authority. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (1)(c)***	Fine up to Euros 40,656 (CZK 1,000,000) ***Act No. 76/2002 Coll. on integrated prevention- article 37 (4)(a)***	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to close down an installation after the authority has issued such a decision. ***Act No. 76/2002 Coll. on integrated***	Fine of up to Euros 284,599 (CZK 7,000,000) ***Act No. 76/2002 Coll. on integrated prevention- article 37 (4) (b)***	N/A	N/A

[65] Article 37 of the Act No. 76/2002 in integrated prevention (in English) http://faolex.fao.org/docs/pdf/cze45693E.pdf

	prevention- article 37 (3) Obligation to fulfil the conditions of the integrated permit. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (2)*** Obligation to take remedial measures in the given time. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (3)***			

*ELVs: Emission Limit Values

Table 28.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in the Czech Republic* [66] [67]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Operating an installation without a permit. ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 38 (2) (a) and 40 (1) (b)*** Infringement or non-compliance with the following requirement: Obligation to comply with the relevant laws relating to VOCs (this is applicable only on producers, importers and dealers of products with limit values of VOCs). ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 40 (1) (c)***	Fine from Euros 811 to Euros 405,872 (20,000 CZK to 10,000,000 CZK). ***Act No. 86/2002 Coll. on air protection and amendment of some laws Article 40 (1) (b) (c)*** Ban or restriction of operation. ***Act No. 86/2002 Coll. on air protection and amendment of some laws Article 38 (2)(a)***	N/A	N/A
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligations of the operator of a very large, large, medium and small stationary source to comply with requirements laid	Fine: the amount of fine depends on the breach of the operator's obligation and on the size of the stationary source. The	N/A	N/A

[66] http://ec.europa.eu/environment/legal/crime/pdf/criminal_pen_vol2.pdf The following laws were analysed for the purposes of filling in the table: Act No 86/2002 Coll. on air protection and on amendment of certain other acts (Air Protection Act).

[67] http://www.mzp.cz/ris/vis-legcz-en.nsf/8DEEB89350217168C125735C0043817B/$file/20050509Sb.pdf and http://www.mzp.cz/ris/vis-legcz-en.nsf/ Decree of the Ministry of the Environment 355/2002 (amended by Decree No. 509/ 2005) on Laying down emission limits and other conditions of operation of other stationary sources of air pollution by emitting volatile organic compounds from processes using organic solvents and the gasoline storage and distribution.

	down in ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 40 (2) – (8) (14).***	amount could be from Euros 20 to Euros 405,872 (CZK 500 to CZK 10,000,000) ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 40(2) – (8) (14)*** Ban or restriction of operation ***Act No. 86/2002 Coll. on air protection and amendment of some laws Article 38 (2)(c)***		

Table 2.29 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in the Czech Republic* [68]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	*Such installation holds an integrated permit, therefore the provisions of Act no. 76/2002. Coll. will apply (IPPC offences) namely:* Carrying out changes without announcing the competent authorities. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (1)(a)*** Carrying out changes of the integrated permit in the period given by the authority without submitting an application. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (1)(c)***	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligations of the operator of very large and large stationary sources to comply with requirements set in Article 11(1) (a) and (b). ***Act No. 86/2002 Coll. on air protection and amendment of some***	Fine from Euros 406 to Euros 405,872 (CZK 10,000 to CZK 10,000,000). ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 40 (7) (a)***	N/A	N/A

[68] http://ec.europa.eu/environment/legal/crime/pdf/criminal_pen_vol2.pdf : The following laws were analysed for the purpose of filling in the table: Act No 86/2002 Coll. on air protection and on amendment of certain other acts (Air Protection Act), Act No 76/2002 on IPPC

	laws, Article 40 (7) (a) ***Also again, the Act No. 76/2002. Coll. will apply (IPPC), namely:*** <u>Infringement or non-compliance with the following requirements:</u> Obligation to close down an installation after the authority has issued such a decision. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (3)*** Obligation to fulfil the conditions of the integrated permit. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (2)*** Obligation to take remedial measures in the given time. ***Act No. 76/2002 Coll. on integrated prevention- article 37 (3)***			

Table 2.30 *Directive 2000/76/EC (WI Directive) [69]: types of offences and related administrative and criminal penalties in the Czech Republic [70]*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an installation without a permit. ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 38 (2) (a) and 40 (1) (b)*** [71]	Fine from Euros 811 to Euros 405,872 (CZK 20,000 to 10,000,000 CZK). ***Act No. 86/2002 Coll. on air protection and amendment of some laws Article 40 (1) (b)*** Ban or restriction of operation . ***Act No. 86/2002 Coll. on air protection and amendment of some laws Article 38 (2)(a)***	N/A	N/A
	Operating an installation that recovers or disposes waste without the necessary permit. ***Act No. 185/2001 Coll. on waste management Article 66 (3)(d)***	Fine up to Euros 405,872 (CZK 10,000,000). ***Act No. 185/2001 Coll. on waste management Article 66 (3) (d)***		
	Managing hazardous waste without the necessary permit. ***Act No. 185/2001 Coll. on waste management Article 66 (4) (d)*** [72]	Fine up to Euros 2,025 234 (CZK 50,000,000). ***Act No. 185/2001 on waste management Article 66 (4) (d)***		
Obligation to supply information for application for permits	N/A [73]	NA	N/A	N/A

[69] Note that incineration or co-incineration plants are either very large or large stationary sources according to the Act No. 86/2002

[70] The following laws were analysed for the purposes of filling in the table: Government Order of 12 April 2006 amending Government Order No. 354/2002 on setting emission limits and other terms and conditions for the incineration of waste, http://www.mzp.cz/ris/vis-legcz-en.nsf/ Government Order of 3 July 2002 setting forth emission limit values and other requirements for waste incineration http://www.mzp.cz/ris/vis-legcz-en.nsf/ Act of 15 May 2001 on waste and amendment of some other acts, in the wording of later regulations http://www.mzp.cz/ris/vis-legcz-en.nsf/

[71] The obligation that incineration and co-incineration plants are required to obtain a permit from the air protection authority is set out in Article 17 (2) (c) of Act No. 86/2002.

[72] eg. Municipal waste incineration plants with the capacity of more than 3 tonnes/hour or incineration plants for hazardous waste with the capacity of ...need to have an IPPC permit so in these cased the act 76/2002 will apply.

[73] Article 4(2) was transposed by Article 17(2) of Decree No. 205/2009. These are mandatory requirements for the application – if this information is not given, the sanction is that the permit will not be granted. However, it does not constitute an offence.

Obligation to notify the competent authority of any changes in the operation of an installation	Operating an installation without a new permit for some changes (eg change in the type of waste, technology, change in the mandatory conditions of operation) - in this case Article *38 (2) (a) and 40 (1) (b)* on the operation without a permit (above) applies. ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 38 (2) (a) and 40 (1) (b)***	N/A	N/A	N/A
Obligation to comply with the conditions set in the permits or mandatory ELVs	<u>Infringement or non-compliance with the following requirements:</u> Obligations of the operator of very large and large stationary sources to comply with requirements set in ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 40 (1) (2) and (7)***	Fine: the amount of fine depends on the breach of the operator's obligation and on the size of the stationary source. The amount could be from Euros 406 to Euros 405,872 (CZK 10,000 to CZK 10,000,000). ***Act No. 86/2002 Coll. on air protection and amendment of some laws, Article 40(1)(2) and (7)*** Ban or restriction of operation ***Act No. 86/2002 Coll. on air protection and amendment of some laws Article 38 (2)(c)***	**Misdemeanours** Management of waste in a place or a building which is not designated for waste management purposes. ***Act 185/2001 Coll. on waste management Article 69 (2) (c)***	**Misdemeanours** Fine up to Euros 40 499 (CZK 1,000,000) . ***Act 185/2001 Coll. on waste management Article 69 (2) (c)***
	Obligation to operate an installations in compliance with the conditions of the permit or mandatory conditions of operation . ***Act 185/2001 Coll. on waste management Article 66 (3) (d)***	Fine up to Euros 405,872 (CZK 10,000,000). ***Act 185/2001 Coll. on waste management Article 66 (3) (d)***		
	Obligation to manage hazardous waste in compliance with the permit. ***Act 185/2001 Coll. on waste management article 66 (4) (d)***	Fine up to Euros 2,025,234 (CZK 50,000,000). ***Act 185/2001 Coll. on waste management Article 66 (4) (d)***		
	Obligation to comply with other requirements relating to waste	Fine up to Euros 40,499 (CZK 1,000,000).		

	management (set by this act or by the decision of the responsible authority according to this act). ***Act 185/2001 Coll. on waste management Article 66 (5)***	***Act 185/2001 Coll. on waste management Article 66 (5)***		

Annex VI – Denmark

DENMARK

1. Overview of penalties related to legislation on industrial installations

In the Danish legal system Environmental Acts are adopted by the Parliament and are supplemented by implementing ministerial orders. The Environmental Protection Act (EPA) is the main transposing legislation for the four Directives relevant to this report. It contains the relevant offences and penalties. It is also the legal basis for the Ministerial Orders transposing the more technical requirements of the Directives.

Chapter 5 of the Environmental Protection Act contains a licensing system that transposes the requirements of the IPPC Directive. Large combustion plants and waste incineration plants falling respectively under Directive 2001/80/EC and Directive 2000/76/EC, are considered installations that require an approval under Chapter 5 of the Environmental Protection Act. The specific requirements of these Directives transposed through Ministerial Regulations shall be applied by relevant operators through the approval procedure of this Chapter.

The transposing legislation for the four directives covered by the study is as follows:

IPPC Directive: The Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse)* and the Approval Order No. 1640 of 13 December 2006 as amended including by Ministerial Order No. 284 of 25 March 2010 *(Bekendtgørelse nr 1640 af 13. December 2006 med senere ændringer inklusiv bekendtgørelse nr. 284 af 25. marts 2010(Godkendelsesbekendtgørelsen))*.

VOC Directive: The Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse)* and the Ministerial Order No. 350 of 29/05/2002 (VOC-Order) *(Bekendtgørelse nr 350 af 29/05/2002 (VOC-bekendtgørelsen)med senere ændringer, senest bekendtgørelse 2010-03-25 nr.283))*.

LCP Directive: Ministerial Order No. 808 of 25/09/2003 (LCP-Order)*(Bekendtgørelse nr 808 af 25/09/2003 (bekendtgørelse om store fyr))* and the Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse)* and the Approval Order No. 1640 of 13 December 2006 as amended including by Ministerial Order No. 284 of 25 March 2010 *(Bekendtgørelse nr 1640 af 13. December 2006 med senere ændringer inklusiv bekendtgørelse nr. 284 af 25. marts 2010(Godkendelsesbekendtgørelsen))*.

WI Directive: Ministerial Order No. 162 on 11 March 2003 (Incineration Order) *(Bekendtgørelse nr 162 af 11/03/2003 (Forbrændingsbekendtgørelsen)),* the Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse)* and the Approval Order No. 1640 of 13 December 2006 as amended including by Ministerial Order No. 284 of 25 March 2010 *(Bekendtgørelse nr 1640 af 13. December 2006 med senere ændringer inklusiv bekendtgørelse nr. 284 af 25. marts 2010(Godkendelsesbekendtgørelsen))*.

The Environmental Protection Act provides for two types of administrative measures and sanctions:

1) Preventive and remedial measures, e.g. the administrative sanctions that the supervisory authority has at its disposal to prevent that negative impact on the environmental occurs as a result of future operating conditions. It concerns the possibility of refusing an environmental approval and grant special conditions (EPA Section 34, para 3) where the responsible persons have lost their so-called environmental responsibility pursuant to Section 40a – e.g. physical or legal persons convicted pursuant to the Criminal Act Section 196, the Environmental protection Act Section 110(2) or similar provisions issued pursuant to this Act .

2) Enforcement measures to ensure compliance with inter alia legal rules, permits and decisions. The Environmental Protection Act gives to the competent authority the power to issue injunctions and prohibitions, to ensure compliance with legal rules, permits and decisions. It may also prescribe corrective measures, which are taken at the offender's expense. The competent authority reports infringements to the police or the public prosecution authorities. The Environmental Protection Act provides for the principle of proportionality with regard to administrative enforcement measures, which should not be more intrusive than necessary in individual cases and take into account the circumstances of each particular situation e.g. the risk and type of negative impact on the environment.

Control functions are primarily exercised by the municipalities. However control functions relating to IPPC related injunctions and prohibitions for existing installations are exercised by the state regional authorities, the so-called Environmental Centres of which there are seven.

Chapter 13 of the Environmental Protection Act sets criminal penalties that include imprisonment and additional corporate fines in some circumstances. Some Ministerial Orders also contain provisions on criminal sanctions. These provisions specifically define which infringements of the requirements of the Act or Regulation shall lead to a criminal penalty. Those obligations that are enforced by Chapter 13 are listed in detail. Section 110(1) of the Environmental Protection Act[74] lists nineteen specific offences referring to specific provisions of this Act.

Offences are often divided between 'offences' and serious 'offences'. For instance serious offences are characterised when an offender acted deliberately or by gross negligence if the infringement resulted in damage to the environment or risk of damage or achieved or intended economic advantages.

The Criminal Code also sets up offences and corresponding penalties and sanctions. The provisions of the Criminal Code have precedence if the sanctions it lays down are equal or more sever than those established by the Environmental Code.

Administrative and criminal sanctions can apply simultaneously.

Finally, the related Danish legal provisions apply to both natural and legal persons alike. The difference is, however, that additional financial penalties may additionally apply to businesses.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Denmark

The table below has been compiled on the basis of the information provided in the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. This was the case for Denmark the assessment is based on the assumption that the listed articles have been fully transposed. When there is a catch-all

[74] Main Danish legal framework related to the environment.

provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Denmark
IPPC Directive	
Catch-all	C
4	X
5	X
6	X
9	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VoC Directive	
Catch-all	C
3(2)	X
4(4)	X
5 (2)(a)	X
5 (2)(b)	X
5 (3)(a)	X
5 (3)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Denmark. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.31 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Denmark*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating a new installation (listed in the Regulation issued pursuant to Section 35 – Annex I of the IPPC Directive) without a permit issued in accordance with this Act. Extending or changing an installation structurally or operationally without approval. ***Environmental protection Act Section 33 and Approval Order Section 2***	Injunctions and prohibitions. ***Environmental protection Act Section 41***	Establish, commence or operate an installation without approval from the relevant authority. ***Environmental protection Act Section 110(1)(6)*** <u>Serious offence</u> It is a serious criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator. ***Environmental Protection Act Chapter 13 Section 110(6) in conjunction with Chapter 13 Section 110 paragraph (2) of this Act***	The fines are determined by the Courts as part of the criminal case and the Acts do not set any maximum amount or range. Fines typically in the range of DKK 10,000 – 40,000 (app Euros 1,200 - 6,000). Seizure of the net profit. Examples: Ruling by the Eastern High Court (ØLD 1991-11-16) a company fined DKK 300,000 (Euros 4,500) for disposal of 21 tons of soil containing heavy metals without the mandatory permit. Seizure of 1,2 mio DKK (Euros 161,000). <u>Serious offence</u> Imprisonment up to two years. This underlines the legislators desire for severe penalties for environmental offences, including an significant increase of the fines. <u>Legal persons</u> The Danish penalties provisions apply to both natural and legal persons alike. Pursuant to the Environmental Protection Act Section 110 (4), legal persons may be imposed sanctions

				pursuant to for under the fifth Chapter of the Criminal Act.
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to supply information for application for permits, including pursuant to the ***Environmental Protection Act Section 35, paragraph 2, Section 39 and the Approval Order Section 7.***	Refusal of granting a permit. It will basically rest with the applicant on his own initiative to provide the approving authority with the necessary information. In case of failure to supply the necessary information to approving authority, it may specify what additional information must be provided and set a deadline. In case of repeated failure to submit the requested information, the procedural detrimental effect occurs, namely that the approving authority must consider the application as annulled. For existing installations which are required to obtain a permit pursuant to § 39, the information may be sought through an injunction issued pursuant to Section 72. According to Section 39, paragraph. 2, the approving authority can, if necessary, prohibit the continued use of unapproved parts company if the installation/activity if the installation fails to meet the statutory deadlines for submission of information. Examples of administrative practice have been published in publication MAD (Environmental Rulings and jurisprudence) e.g. MAD 2000 1073 in which a permit of an existing company was lifted by the Environmental Protection Agency and the matter remitted for reconsideration, since no measurements for assessment of its noise ratio had been submitted). Another example is MAD 2009 349 in which the Environmental Board of Appeal refused an application as the application did not contain the	Failure to apply for a permit in accordance with Rules issued pursuant to Section 7 of this Act or failure to apply pursuant to Section 39 of this Act. ***Environmental protection Act Section 110(1)(8)) and Approval Order Section 22(1)(2)***	Ibid for the types of penalties. It has not been possible to find any jurisprudence of the size of the fines for failure to supply information for application of permits.

		information required for in the Approval Order (Annex 5).		
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out any changes in the operation of an installation without notifying the competent authority. Extending or changing the installation structurally of operationally before the extension or change is approved. ***Environmental protection Act Section 33 and Approval Order Section 2***	Injunctions and prohibitions ***Environmental protection Act Section 41 and 41 c***	The installation is extended changed structurally or operationally in a way that increases pollution without approval of the relevant competent authority. This is a serious criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator. ***Environmental Protection Act Chapter 13 Section 110(6) read in conjunction with Chapter 13 Section 110 para (2) of this Act***	Ibid No recent examples of jurisprudence on the size of fines for this type of offences. The jurisprudence does not reflect the more severe fines for violations of the IPPC requirements since 2003.
Obligation to comply with the conditions set in the permit or mandatory ELV's	Infringement or non-compliance with the following requirements: Obligation to comply with the conditions set in the permit or mandatory ELV's ***Environmental protection Act Section 34 and Approval Order Section 14***	Injunctions and prohibitions ***Environmental protection Act Section 41 and 41 c***	Failure to comply with injunction or prohibition issued pursuant to this Act ***Environmental Protection Act Section 110(1)(3)*** Neglect to comply with the terms of a permit or conditions laid down pursuant to this Act or to rules issued in pursuance thereof. ***Environmental Protection Act Section 110(1)(4)***	Ibid Examples of jurisprudence on the size of fines: Supreme Court ruling U2001.2045H A company taking over a chemical installation under bankruptcy was fined DKK 800,000 (app. Euros 120,000) and 40 days imprisonment for its Director combined with a fine of DKK 300,000 (app. Euros 40,000) for failure to comply with the conditions set in the permit following several injunctions on disposal of chemical waste. Another example is a ruling by the Eastern High Court where a County was fined DKK 500.000 (App Euros 65,000) for failure to comply with the mandatory ELV's for a waste incineration plant and seizure of the saved amount of DKK 4 mill (app. Euros 350,000).

Table 32.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Denmark*

Transposing legislation: Ministerial Order No. 350 of 29 May 2002 (VOC-Order) *(Bekendtgørelse nr 350 af 29/05/2002 (VOC-bekendtgørelsen)med senere ændringer, senest bekendtgørelse 2010-03-25 nr. 283)) and* The Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse).*

Denmark has opted for general binding rules to transpose Article 4, 5, 8 and 9 of the VOC Directive The VOC Order also requires that all new installations not covered by Directive 96/61/EC (repealed by Directive 2008/1/EC) are registered or undergo authorisation before being put into operation and that all existing installations must have been registered by 31 October 2007 at the latest.

	Administrative		**Criminal**	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Infringement or non-compliance with the following requirements: Obligation to apply for an authorisation/ registration for new or existing installations ***The VOC Order Section 12***	Injunctions and prohibitions. ***VOC Order Section 12, paragraph 2 and 4 and Environmental Protection Act Section 41 and 41 c***	Installation emitting Volatile Organic Compounds covered by Chapter 5 of the Environmental Protection Act and the Approval Order Start or operate an installation without approval from the relevant authority This is a serious criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator. ***Environmental Protection Act Chapter 13 Section 110(6) read in conjunction with Chapter 13 Section 110 paragraph (2) of this Act*** Installation emitting Volatile Organic Compounds not covered by Chapter 5 of the Environmental Protection Act and the Approval Order Failure to apply for a registration pursuant to Section 8(4) or 9(4) of the VOC Order.	Fines Seizure of the net profit if any. The fines are determined by the Courts as part of the criminal case. Serious offence -Imprisonment up to two years. This underlines the legislators desire for severe penalties for environmental offences, including an significant increase of the fines. Legal persons The Danish penalties provisions apply to both natural and legal persons alike. Pursuant to Section 12(3) of the VOC Order, legal persons may be imposed sanctions pursuant to for under the fifth Chapter of the Criminal Act.

			Violation of injunctions notified pursuant to Section 12(1),(2) and (4) of the VOC Order. ***VOC Order Section Section 15***	
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELV's	Infringement or non-compliance with the following requirements: Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELV's ***VOC Order Section 12***	Injunctions and prohibitions ***VOC Order Section 12, paragraph 1, 2 and 4 and Environmental Protection Act Section 41 and 41 c***	Installations requiring a notice of approval Failure to comply with the conditions for limitation and control of emissions of volatile organic compounds set in the environmental permit This is a criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator. ***Chapter 8 Section 15 paragraph 1 (4) VOC-Order read in conjunction with Chapter 8 Section 15 paragraph 2 VOC-Order*** Installations not requiring a notice of approval Failure to comply with specific requirements related to the emission of VOC. This is a criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator.	Ibid

			Chapter 8 Section 15 paragraph 1 (4) VOC-Order read in conjunction with Chapter 8 Section 15 paragraph 2 VOC-Order	

Table 2.33 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Denmark*

Transposing legislation: Ministerial Order No. 808 of 25 September 2003 (LCP-Order)*(Bekendtgørelse nr 808 af 25/09/2003 (bekendtgørelse om store fyr))*and the Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse)* and the Approval Order No. 1640 of 13 December 2006 as amended including by Ministerial Order No. 284 of 25 March 2010 *(Bekendtgørelse nr 1640 af 13. December 2006 med senere ændringer inklusiv bekendtgørelse nr. 284 af 25. marts 2010(Godkendelsesbekendtgørelsen)).*

Large combustion plants are one type of installations that require a permit under Chapter 5 of the Environmental Protection Act. The specific requirements in the LCP Directive shall be applied by operators of large combustion plants through the approval procedure of this Chapter.

Section 1 paragraph 2 of Chapter 1 of the Executive Order No. 808 of 25 September 2003 provides:

'This Order supplements the provisions of the Approval Order. The Approving Authority may impose stricter requirements than those stipulated in this Ministerial Order."

	Administrative		**Criminal**	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC
Obligation to supply information for application for permits	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC
Obligation to notify the competent authority of any changes in the operation of an installation	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC
Obligation to comply with the conditions set in the permit or mandatory ELV's	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC

Table 2. 4. *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Denmark*

Transposing legislation: Ministerial Order No. 162 of 11 March 2003 (Incineration Order) *(Bekendtgørelse nr 162 af 11/03/2003 Forbrændingsbekendtgørelsen)*. The Environmental Protection Act No. 879 of 26 June 2010 *(Lovbekendtgørelse nr. 879 af 26. Juni 2010 om miljøbeskyttelse)* and the Approval Order No. 1640 of 13 December 2006 as amended including by Ministerial Order No. 284 of 25 March 2010 *(Bekendtgørelse nr 1640 af 13. December 2006 med senere ændringer inklusiv bekendtgørelse nr. 284 af 25. marts 2010(Godkendelsesbekendtgørelsen))*.

Waste Incineration plants are one type of installations that require an approval under Chapter 5 of the Environmental Protection Act. The specific requirements in the Waste Incineration Directive shall be applied by operators of waste incineration plants through the approval procedure of this Chapter.

See Chapter 2 and Chapter 3 of Ministerial Order No. 162, 11/03/2003.

	Administrative		**Criminal**	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC
Obligation to supply information for application for permits	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC
Obligation to notify the competent authority of any changes in the operation of an installation	Ibid IPPC	Ibid IPPC	Ibid IPPC	Ibid IPPC
Obligation to comply with the conditions set in the permits or mandatory ELV's	Ibid IPPC	Ibid IPPC	Ibid IPPC And ***Incineration Order Section 23 (1) (1)*** according to which it is an offence to violate the conditions set in the permits or mandatory ELV's in the Incineration order Sections 4,5, 9, 12, 13(1) & (2), 14 15, 16(2) &(3), 19(1) and 20.	Ibid IPPC As indicated above the Eastern High Court has in a ruling on the waste incineration regulation, fined a County DKK 500,000 (App Euros 65,000) for failure to comply with the mandatory ELV's for a waste incineration plant and seizure of the saved amount of DKK 4 mill (app. Euros 350,000).

Annex VII – Estonia

ESTONIA

1. Overview of penalties related to legislation on industrial installations

Estonian law is based on the continental law system. Estonian penal law distinguishes between two types of offences: criminal offences and misdemeanours. The branch of penal law that deals with misdemeanours is sometimes referred to as administrative penal law. Criminal offences are exhaustively stipulated in the Penal Code. Misdemeanours are stipulated in the Penal Code and other laws, i.e. there is no single code listing all misdemeanours, instead these offences are usually stipulated in the relevant specific laws. For the purposes of the current study the relevant specific laws are as follows: the Integrated Pollution Prevention and Control Act (RT I 2001, 85, 512), the Ambient Air Protection Act (RT I 2004, 43, 298), the Waste Act (RT I 2004, 9, 52) and the Water Act (RT I 1994, 40, 655).

Prosecution of private legal persons for offences does not, in principle, differ from the prosecution of natural persons. According to the Penal Code a legal person can be prosecuted when: 1) the law stipulating the offence explicitly allows such prosecution; 2) the punishable act is committed by a body or senior official or competent representative of the legal person; 3) the punishable act is committed in the interest of the legal person. Prosecution of a legal person does not preclude prosecution of the natural person who committed the offence – to the contrary: the parallel prosecution is the norm. The Penal Code does not allow prosecuting state, local governments and legal persons in public law. The exemption is based on the assumptions that the state cannot punish itself and that the legality of state actions has to be ensured by other means. Nonetheless, the Penal Code allows prosecution of the private legal person established by the state and the private legal person, whose major shareholder is the state. Also, the Penal Code allows prosecution of a private legal person fulfilling public functions on the basis of an administrative contract.

The distinction between criminal offences and misdemeanours is based on the principal punishments available for a particular offence. Punishments for criminal offences are more severe reflecting the more serious nature of these offences. If a person commits an act, which comprises the necessary elements of both a misdemeanour and a criminal offence, the person is punished only for the criminal offence. Principal punishments for criminal offences are pecuniary punishment (both natural and legal persons), imprisonment (natural persons) and compulsory dissolution (legal persons). Principal punishments for misdemeanours are detention (natural persons) and fine (both natural and legal persons).

The pecuniary punishment for natural persons is expressed in daily rates. The daily rate is calculated on the basis of the average daily income of the convicted offender. The daily rate may be reduced due to special circumstances, or increased on the basis of the standard of living of the convicted offender. The pecuniary punishment varies from 30 - 500 daily rates. In case of a legal person, the pecuniary punishment varies from Euros 3,200 – 16,000,000.[75] The term for imprisonment varies from 30 days to 20 years. Under exceptional circumstances the court may impose a life imprisonment. The compulsory dissolution can be imposed on a legal person if the commission of criminal offences has become part of the activities of the legal person. Punishments for criminal offences can be imposed only by the court.

The fine for natural persons is expressed in fine units. Unlike the pecuniary punishment for criminal offences, the fine unit does not depend on the income of the offender. The fine unit is Euros 4. A fine varies from 3 to 300 fine units, i.e. Euros 12 to 1,200. In case of a legal person, fine varies from Euros

[75] The amount of fines and pecuniary penalties are expressed in Estonian Krone (EEK) in the Estonian law in force as of 10.12.2010. However, the EEK will by replaced by the Euro on 01.01.2011. Therefore, the amounts in EEK were replaced with the amounts in EUR in the study using the calculation method stipulated in the Act on Putting Euros into Use (Euro kasutusele võtmise seadus RT I 2010, 22,108).

32 to 32,000. A fine can be imposed either by the court or an extra-judicial body that is listed in the relevant law. The primary extra-judicial body that conducts the extra-judicial proceedings is the Environmental Inspectorate. The maximum term for detention is 30 days. Detention can be imposed only by the court.

The penal law relevant for the current study tends to rely on generic or catch-all type of offences, e.g. "Violation of the requirements for protection of the ambient air is punishable by a fine." (the Ambient Air Protection Act §139), "Acting without a natural resource utilisation permit or pollution permit where such permit is required, or violation of the requirements set forth in the permit, is punishable by a pecuniary punishment." (the Penal Code §363). Such approach has the merit of providing penalties for a great number of requirements. On the other hand, it is not always clear whether a particular act qualifies as the offence. For instance, it is not self-evident what constitutes "the requirement for protection of the ambient air" and "pollution permit" is not defined in law.

Estonian penal law is under constant review. Currently, there are draft laws discussed in the Parliament and in the government that amend the relevant provisions in the Penal Code and in the specific acts. The nature of these amendments is evolutionary rather than revolutionary.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Estonia

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. This was the case for Estonia the assessment is based on the assumption that the listed articles have been fully transposed. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

However, it should be noted that the identification of 'catch-all' provisions is difficult in the case of Estonia. Estonian penal law tends to rely on another type of catch-all provisions, such as article 139 of the Ambient Air Protection Act "Violation of requirements for protection of ambient air shall be punished [...]" or provisions of the Criminal Code that sets up sanctions for non-compliance with the obligation to get a permit or submission of false information to an administrative authority. In other words, the catch-all provision actually applies across various acts transposing the four directives rather than applying to all provisions of national legislation transposing one specific directive.

Article	Estonia
IPPC Directive	
Catch-all	-
4	X
5	X
6	-[76]
9	-
12 (1)	-
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	
3(2)	X
4(4)	X
5 (2)(a)	X
5 (2)(b)	X
5 (3)(a)	X
5 (3)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	
4 (1)	X
4 (2)	X
4 (4)	-
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	
4 (1)	X
4 (2)	-[77]
4 (8)	-
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	-
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

[76] Estonian penal law provides a penalty for submitting false information.
[77] Estonian penal law provides a penalty for submitting false information.

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Estonia. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.34 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Estonia*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating without a permit in a category of activity for which a permit is required. Only legal persons can be prosecuted. ***Integrated Pollution Prevention and Control Act §37***	Fine up to Euros 3,200. ***Integrated Pollution Prevention and Control Act, §37***	Acting without a natural resource utilisation permit or pollution permit where such permit is required. Both natural and legal persons can be prosecuted. ***Penal Code §363***	Pecuniary punishment. The punishment for legal persons is from Euros 3,200-16,000,000. The punishment for natural persons depends on their average income. ***Penal Code §363, §44***
Obligation to supply information for application for permits	*No offence* Remark. If an application for a permit does not contain all necessary information required the issuer of permits has to return the application and indicate the deficiencies contained in the application and establish a term for the elimination thereof. The permit cannot be issued if false information has been submitted upon application of permit. The permit has to be revoked when the competent authority discovers that upon application of permit false information of material importance was intentionally submitted. ***Integrated Pollution Prevention and Control Act §11(3), §16(1)3), §26(3)***		Submission of false information to an administrative agency, if committed in order to obtain an official document or any other benefit or gain. Both natural and legal persons can be prosecuted ***Penal Code §280***	Pecuniary punishment. The punishment for legal persons is from Euros 3,200 to 16,000,000. The punishment for natural persons depends on their average income. Natural persons can also be imprisoned for up to 1 year. ***Penal Code §363, §44***
Obligation to notify the competent authority of any changes in the operation of an installation	*No offence* However, changing operation without modifying the permit may constitute a violation of the conditions of the permit.		*No offence*	
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to fulfil the requirements established by permit. Only legal persons can be prosecuted.	Fine up to Euros 3,200. ***Integrated Pollution Prevention and Control Act, §37***	Violation of requirements set forth in a natural resource utilisation permit or pollution permit. Both natural and legal persons can be prosecuted. ***Penal Code §363***	All offences allow pecuniary punishment. Certain offences also allow imprisonment of natural persons (see below.) The pecuniary punishment for legal persons is from Euros 3,200 to

	Integrated Pollution Prevention and Control Act §37 Violation of procedure for utilisation of natural resources or procedure for maintenance of records on pollution. Both natural and legal persons can be prosecuted. ***Penal Code §366***	Natural persons can be fined up to 100 fine units (Euros 400) or detained (up to 30 days). Legal persons can be fined up to Euros 2,000. ***Penal Code §366, §47, §48***	Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if significant damage is caused thereby to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof. Both natural and legal persons can be prosecuted. ***Penal Code §364(1)(3)***	16,000,000. The punishment for natural persons depends on their average income. ***Penal Code §44, §§363-365, §§367-368***
	<u>Infringement or non-compliance with the following requirements:</u> Obligation to respect the requirements for protection of ambient air. Both natural and legal persons can be prosecuted. ***Ambient Air Protection Act §139(1)(2)***	Natural persons can be fined up to 100 fine units (Euros 400) or detained (up to 30 days). Legal persons can be fined up to Euros 2,000. ***Penal Code §366, §47, §48***	Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person. Both natural and legal persons can be prosecuted. ***Penal Code §364(2)(3)***	Up to 5 years of imprisonment. ***Penal Code §364(2)***
	Obligation to respect the requirements for the prevention of waste generation or for waste management or deposit of waste outside of waste management facilities. Both natural and legal persons can be prosecuted. ***Waste Act §120***	Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 3,200. ***Waste Act §120,,Penal Code §47***		
	Obligation to respect the procedure for water protection and use. Both natural and legal persons can be prosecuted. ***Water Act §38[5]***	Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to Euros 2,000. ***Water Act §38[5],Penal Code §47***	Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits through negligence, if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person . Both natural and legal persons can be prosecuted. ***Penal Code §365***	Up to 3 years of imprisonment. ***Penal Code §365***
	Obstruction of state supervision, refusal to submit or failure to submit on time documents or information necessary for state supervision, submission of false information, or submission of documents or information in a manner which does not permit exercise of state supervision. Only natural persons can be prosecuted. ***Penal Code §279***	Natural persons can be fined up to 300 fine units (Euros 1,200) or detained (up to 30 days). ***Penal Code §366, §47, §48***		Up to 3 years of imprisonment. ***Penal***

			Violation of requirements for handling chemicals or waste dangerous to human health or the environment, if such violation causes a danger to human life or health or to the environment Both natural and legal persons can be prosecuted. ***Penal Code §367(1)(3)*** Violation of requirements for handling chemicals or waste dangerous to human health or the environment, if such violation causes a danger to human life or health or to the environment through negligence. Both natural and legal persons can be prosecuted. ***Penal Code §367(2)(3)*** . Violation of the requirements for handling chemicals or waste dangerous to human health or the environment through negligence, if such violation causes a danger to human life or health or to the environment. Both natural and legal persons can be prosecuted. ***Penal Code §368***	***Code §367(1)*** Up to 1 year of imprisonment. ***Penal Code §367(2)*** Up to 1 year of imprisonment. ***Penal Code §368)***

*ELVs: Emission Limit Values

Table 2.35 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Estonia*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to fulfil the requirements for protection of ambient air. Both natural and legal persons can be prosecuted. ***Ambient Air Protection Act §139(1)(2)***	Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to Euros 2,000**.** ***Ambient Air Protection Act §139(1)(2),Penal Code §47***	Acting without a pollution permit where such permit is required. Both natural and legal persons can be prosecuted**.** ***Penal Code §363***	Pecuniary punishment. The punishment for legal persons is from Euros 3,200 to 16,000,000 EUR. The punishment for natural persons depends on their average income. ***Penal Code §363, §44***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to respect the requirements for protection of ambient air. Both natural and legal persons can be prosecuted. ***Ambient Air Protection Act §139(1)(2)*** Violation of procedure for utilisation of natural resources or procedure for maintenance of records on pollution. Both natural and legal persons can be prosecuted. ***Penal Code §366***	Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to Euros 2,000. ***Ambient Air Protection Act §139(1)(2),Penal Code §47*** Natural persons can be fined up to 100 fine units (Euros 400) or detained (up to 30 days). Legal persons can be fined up to Euros 2,000. ***Penal Code §366, §47, §48***	Violation of requirements set forth in a natural resource utilisation permit or pollution permit. Both natural and legal persons can be prosecuted. ***Penal Code §363*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if significant damage is caused thereby to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof. Both natural and legal persons can be prosecuted. ***Penal Code §364(1)(3)*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if	All offences allow pecuniary punishment. Certain offences also allow imprisonment of natural persons (see below.) The pecuniary punishment for legal persons is from Euros 3,200 to 16,000,000. The punishment for natural persons depends on their average income. ***Penal Code §44, §§363-365, §§367-368*** Up to 5 years of imprisonment. ***Penal Code §364(2)***

			if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person. Both natural and legal persons can be prosecuted. ***Penal Code §364(2)(3)***	
			Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits through negligence, if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person . Both natural and legal persons can be prosecuted. ***Penal Code §365***	Up to 3 years of imprisonment. ***Penal Code §365***

Table 2.36 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Estonia*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirement: Obligation to respect the requirements for protection of ambient air. Both natural and legal persons can be prosecuted. ***Ambient Air Protection Act §139(1)(2)***	Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to Euros 2,000. ***Ambient Air Protection Act §139(1)(2),Penal Code §47***	*No offence*	
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to respect the requirements for protection of ambient air. Both natural and legal persons can be prosecuted. ***Ambient Air Protection Act §139(1)(2)*** Violation of procedure for utilisation of natural resources or procedure for maintenance of records on pollution. Both natural and legal persons can be prosecuted. ***Penal Code §366***	Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to 2,000. ***Ambient Air Protection Act §139(1)(2),Penal Code §47*** Natural persons can be fined up to 100 fine units (Euros 400) or detained (up to 30 days). Legal persons can be fined up to Euros 2,000. ***Penal Code §366, §47, §48***	Violation of requirements set forth in a natural resource utilisation permit or pollution permit. Both natural and legal persons can be prosecuted. ***Penal Code §363*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if significant damage is caused thereby to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof. Both natural and legal persons can be prosecuted. ***Penal Code §364(1)(3)*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if	All offences allow pecuniary punishment. Certain offences also allow imprisonment of natural persons (see below.) The pecuniary punishment for legal persons is from Euros 3,200 to 16,000,000. The punishment for natural persons depends on their average income. ***Penal Code §44, §§363-365, §§367-368*** Up to 5 years of imprisonment. ***Penal Code §364(2)***

			if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person. Both natural and legal persons can be prosecuted. ***Penal Code §364(2)(3)*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits through negligence, if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person . Both natural and legal persons can be prosecuted. ***Penal Code §365***	Up to 3 years of imprisonment. ***Penal Code §365***

Table 2.37 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Estonia*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Handling of waste without a waste permit, if a permit is required. Both legal and natural persons can be prosecuted. ***Waste Act §120[1]*** Handling of hazardous waste without a handling licence, if a licence is required. Both legal and natural persons can be prosecuted. ***Waste Act §120[3]***	Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 32,000. ***(Waste Act 120[1],Penal Code §47)*** Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 32,000. ***Waste Act §120[3],Penal Code §47***	Acting without a natural resource utilisation permit or pollution permit where such permit is required. Both natural and legal persons can be prosecuted. ***Penal Code §363***	Pecuniary punishment. The punishment for legal persons is from Euros 3,200 to 16,000,000 EUR. The punishment for natural persons depends on their average income. ***Penal Code §363, §44***
Obligation to supply information for application for permits	*No offence* Remark. If a person fails to submit the required information or documents together with an application or if the application contains any other deficiencies, an administrative authority shall, at the first opportunity, designate a term to the applicant for elimination of the deficiencies. If deficiencies are not eliminated within the term, the administrative authority may refuse to review the application. ***Administrative Procedure Act §15 (2)(3)***	No sanction Remark. A waste permit is not issued if the applicant has submitted false information or forged document. ***Waste Act §83 (1) 1)***	Submission of false information to an administrative agency, if committed in order to obtain an official document or any other benefit or gain. Both natural and legal persons can be prosecuted. ***Penal Code §280***	Pecuniary punishment. The punishment for legal persons is from Euros 3,200 to 16,000,000 EUR. The punishment for natural persons depends on their average income. Natural persons can also be imprisoned for up to 1 year. ***Penal Code §363, §44***
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the permits or	Handling of waste in violation of requirements of permit Both legal and natural persons can be prosecuted.	Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 32,000.	Violation of requirements set forth in a natural resource utilisation permit or pollution permit. Both natural and legal	All offences allow pecuniary punishment. Certain offences also allow imprisonment of natural persons (see

mandatory ELVs	***Waste Act §120[1]*** Handling of hazardous waste in violation of the requirements of the licence. Both legal and natural persons can be prosecuted. ***Waste Act §120[3]*** <u>Infringement or non-compliance with the following requirements:</u> Obligation to fulfil the requirements of a permit for the special use of water. Both natural and legal persons can be prosecuted. ***Water Act §38[4]*** Obligation to fulfil the requirements for the prevention of waste generation or for waste management or deposit of waste outside of waste management facilities. Both natural and legal persons can be prosecuted. ***Waste Act §120*** Obligation to respect the procedure for water protection and use. Both natural and legal persons can be prosecuted. *Water Act §38[5]* Obligation to respect the procedure for establishment, operation and closure of waste management facilities. Both natural and legal persons can be prosecuted. ***Waste Act § 121*** Obligation to comply with the procedure for keeping record concerning waste or submission of reports, or submission of incorrect data. Both natural and legal persons can be prosecuted.	***Waste Act 120[1] ,Penal Code §47*** Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 32,000. ***Waste Act §120[3],,Penal Code §47*** Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to Euros 2,000. ***Water Act §38 [4],Penal Code §47*** Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 3,200. ***Waste Act §120,Penal Code §47*** Natural persons can be fined up to 100 fine units (Euros 400). Legal persons can be fined up to Euros 2,000. ***Water Act §38[5],Penal Code §47*** Natural persons can be fined up to 300 fine units (Euros 1,200). Legal persons can be fined up to Euros 32,000. ***Waste Act §121,,Penal Code §47*** Natural persons can be fined up to 200 fine units (Euros 800). Legal persons can be fined up to Euros 2,000. ***Waste Act §120[6],Penal Code §47***	persons can be prosecuted. ***Penal Code §363*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if significant damage is caused thereby to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof. Both natural and legal persons can be prosecuted. ***Penal Code §364(1)(3)*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits if if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person. Both natural and legal persons can be prosecuted. ***Penal Code §364(2)(3)*** Unlawful release of substances, energy or waste into the environment, or causing noise exceeding the established limits through negligence, if it causes: 1) significant damage to the quality of water, soil or ambient air, or to the individuals of animal or plant species or parts thereof; 2) serious damage to the health of a person, or 3) the death of a person . Both natural and legal persons can be prosecuted.	below.) The pecuniary punishment for legal persons is from Euros 3,200 to 16,000,000. The punishment for natural persons depends on their average income. ***Penal Code §44, §§363-365, §§367-368*** Up to 5 years of imprisonment. ***Penal Code §364(2)*** Up to 3 years of imprisonment. ***Penal Code §365***

	Waste Act §120[6]		***Penal Code §365*** Violation of requirements for handling chemicals or waste dangerous to human health or the environment, if such violation causes a danger to human life or health or to the environment Both natural and legal persons can be prosecuted. ***Penal Code §367(1)(3)*** Violation of requirements for handling chemicals or waste dangerous to human health or the environment, if such violation causes a danger to human life or health or to the environment through negligence. Both natural and legal persons can be prosecuted. ***Penal Code §367(2)(3)*** Violation of the requirements for handling chemicals or waste dangerous to human health or the environment through negligence, if such violation causes a danger to human life or health or to the environment. Both natural and legal persons can be prosecuted. ***Penal Code §368***	 Up to 3 years of imprisonment. ***Penal Code §367(1)*** Up to 1 year of imprisonment. ***Penal Code §367(2)*** Up to 1 year of imprisonment. ***Penal Code §368)***

Annex VIII – Finland

FINLAND

1. Overview of penalties related to legislation on industrial installations

In Finland, the legal obligations relating to the four Directives on industrial installations are transposed by a combination of different legislation including the Environment Protection Act (YSL 86/2000), as well as more specific legislation relating to each Directive, including, as follows:

IPPC Directive: Environmental Protection Decree 169/2000;

VOC Directive: Government Decree on the reduction of emissions of volatile organic components caused by the use of organic solvents in certain operations and installations 435/2001;

LCP Directive: Government Decree on the reduction of emissions of SO2, NOx and dust from combustion plants greater than 50 MW 1017/2002 as amended by Decree 907/205;

WI Directive: Government Decree on waste incineration 362/2003; Environmental Protection Decree 169/2000.

All administrative measures relating to industrial installations are found in Section 84 of the Environment Protection Act (YSL 86/2000). In accordance with this provision, administrative sanctions are aimed at either enforcing the legal obligations of operations, or closing down or limiting illegal activities. Measures may include direct interventions by supervising authorities, especially in case of danger to health or safety. In other cases, the decision-making procedure consists of two elements: prohibition of activities or a prescribed action under the threat of a fine, and the threat of fulfilment of the obligation by authorities at the expense of the operator. If the prohibition or prescription is not complied with, a fine will be imposed. The procedure may be repeated, if necessary. There is no limit on the monetary fine. Liability is the same for legal and natural persons. According to Section 8 of the Act on Conditional Fines (1113/1990), the amount shall be proportional to the nature and size of the obligation as well as the financial situation of the liable person.

According to section 16 of the Environmental Protection Act "the Government may additionally, in order to transpose obligations of international and European law binding Finland, enact decrees on the validity of an environmental permit, its revision and the prescriptions of a permit as well as other comparable requirements foreseen in sections 11 to 15 to prevent environmental pollution." This provision is the legal basis for bringing EU Directives fully under the sanctioning regime of this Act. The Act itself and the related Decree 169/2000 were enacted in order to transpose the IPPC Directive.
The Finnish permit system follows the structure of administrative sectors and corresponding legislation. There are separate permit rules according to sectoral law, i.e. water law, soil extraction law, chemicals law etc. Each of these acts is substantially connected to the prohibitions and requirements based of the Environmental Protection Act (and the related Waste Act) in cases where polluting emissions might occur. The result is that none of these related permit decisions may allow pollution which is restricted under the Environmental Protection Act and provisions enacted on the basis of this Act; these provisions include the governmental decrees of this study. Section 84 of the Environmental Protection Act provides full coverage of situations under this Act, and related decrees. Section 84 applies both to statutes (decrees, decisions) which are enacted directly by this Act and to related statutes when so prescribed (e.g. waste, chemicals). The provisions also apply to the obligations under the waste legislation to the extent these rules are applicable to waste activities regulated under the Environmental Protection Act.

The procedure for using administrative powers is generally regulated separately, in the Act on Conditional Fines (1113/1990) and additionally in Section 88 of the Environmental Protection Act. According to the latter provision, environmental regional state (permit and supervising) authorities and corresponding municipal authorities are the competent authorities for environmental matters. As

mentioned above, all EU directives on the reduction and control of environmental emissions fall within the scope of the generally applicable Environmental Protection Act, and the mandate is given to enact the requirements by means of decree. Penalties and other sanctions must be enacted by legislative acts and cannot therefore arise from decrees. The sanction system of the Act, as mentioned, applies without exceptions to all obligations which the government is entitled to introduce on the basis of EU law.

Criminal offences and sanctions are provided for primarily by Section 116 of the Environmental Protection Act 2000, as amended by 137/2006, 346/2008 and 681/2008 and Chapter 48 of the Penal Code (39/1889 amended by 578/1995, 112/2000 and 748/2007). Chapter 48 includes six different types of environmental offences, four of which may be applicable to environmental offences in respect of pollution caused by industrial installations. These include Section 1 (impairment of the environment), Section 2 (aggravated impairment of the environment), Section 3 (environmental infraction) and Section 4 (negligent impairment of the environment). These provisions are quite general, as they cover a wide range of actions. Chapter 48 also includes Section 7 (clarifying criminal liability, but not the liability for damages which is regulated by the Act on Environmental Damages (19.8.1994/737), and Section 9 which provides a statute of limitations and contains a reference provision concerning corporate criminal liability. Chapter 9 of the Penal Code sets the specific provisions concerning the corporate criminal liability and applies to the offences referred to in Chapter 48. Chapter 10 of the Penal Code specifies general provisions on forfeiture.

Criminal penalties vary from a fine (which must be proportional to the benefits accrued due to non – compliance) to a maximum of 6 years imprisonment, depending on the seriousness of the offence. An environmental violation involving danger to public health may also fall under Chapter 34 of the Penal Code (in serious cases up to 10 years imprisonment, no fine sanction). Laws outside the Penal Code only cover minor offences punishable by a fine. In practice, these sectoral provisions are numerous and applicable to the most common infringements such as acting without a permit or breach of emission limit values. Section 116 of the Environmental Protection Act, mentioned above, is a good example. All penalties must be based on law; they cannot be set by decrees.

As crimes are committed by physical persons, penalties focus on natural persons. However, companies may profit from those violations and even encourage persons to act illegally which is not in line with the polluter pays principle. Therefore, in those situations legal persons may be sentenced to a penalty called a "Community-fine" (Chapter 10 Penal Code), even in addition to the penalty imposed on the natural person. These provisions are fully applicable to the activities under the Environmental Protection Act and the Waste Act (The Waste Act 1072/1993 is applicable in all procedures of the Environmental Protection Act when waste activities, regulated by EU law, are involved). Presently the amount of the Community-fine is between Euros 850 and 850,000. The Criminal Code does not differentiate categories of environmental law, which means that the rules are the same for all kinds of violations against the Environmental Protection Act, other legislation (waste and water laws) and related decrees.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Finland

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation. The decrees by which the Directives in question have been transposed do not provide penalty rules of their own. Instead, Section 84 of the Environmental Pollution Act has a full mandate for all obligations concerned, including specific technical and substantial requirements.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This

would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Finland
IPPC Directive	
Catch-all	C
4	-
5	-
6	-
12 (1)	-
12 (2)	-
14 (a)	-
14 (b)	-
14 (c)	-
VoC Directive	
Catch-all	C
3(2)	-
4	-
5 (2)(a)	-
5 (2)(b)	-
5 (4)	-
5 (5)	-
5 (6)	-
5 (8)	-
5 (9)	-
5 (10)	-
8 (1)	-
9 (1)	-
10 (a)	-
LCP Directive	
Catch-all	C
4 (1)	-
4 (2)	-
4 (4)	-
5	-
7 (1)	-
9	-
10	-
13	-
WI Directive	
Catch-all	C
4 (1)	-
4 (2)	-
4 (8)	-
5 (1)	-
5 (2), (3) & (4)	-
6	-
7	-
8 (1)	-
8 (4)	-

8 (5)	-
8 (7)	-
9	-
10 (1)	-
10 (2)	-
11	-
12 (2)	-
13 (2)	-
13 (3)	-
13 (4)	-

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Finland. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.38 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Finland*[78]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Failure to comply with the requirements of the Act, (including those requirements set by Decrees under the Act). This covers all legal and administrative measures of the pollution control regime ***Environmental Protection Act 86/2000, Section 84*** For example, Section 1 of Decree 169/2000 prescribes the requirement of an environmental permit (a broader list than required by the IPPC Directive).	<u>Rectification of a violation or negligence</u> (1) A permit or supervisory authority may *1)* prohibit a party that violates this Act or a decree or regulation based on it from continuing or repeating a procedure contrary to a provision or regulation; *2)* order a party that violates this Act or a decree or regulation based on it to fulfil its duty in some other way; *3)* order a party as referred to in paragraphs 1 and 2 to restore the environment to what it was before or to eliminate the harm to the environment caused by the violation; *4)* order an operator to conduct an investigation on a scale sufficient to establish the environmental impact of operations if there is justified cause to suspect that they are causing pollution contrary to this Act. ***Environmental Protection Act***	Failure to comply with the requirements of the Act, (including those requirements set by Decrees under the Act). This covers all legal and administrative measures of the pollution control regime. ***Environmental Protection Act 86/2000, Section 116***	A fine (proportional to the perpetrators daily income) according to the Ch 2(a) of the Finnish Criminal Code or a sentence to imprisonment for at most two years. If the circumstances are especially aggravated the perpetrator shall be sentenced to imprisonment for at least four months and at most six years. A corporate fine between Euros 850 and Euros 850, 000. ***Chapter 48, Sections 1-4, of the Penal Code 39/1889, as amended by 578/1995 and 112/2000***

[78] The requirements of the IPPC Directive were transposed in Finland through the Environmental Act 86/2000 and the Environmental Protection Decree 169/2000. Sanctions related to the infringement of IPPC Directive are only mentioned in the Environmental Act 86/2000.

		86/2000, Section 84 (Unofficial translation)		
Obligation to supply information for application for permits	As above	As above	As above	As above
Obligation to notify the competent authority of any changes in the operation of an installation	As above	As above	As above	As above
Obligation to comply with the conditions set in the permit or mandatory ELVs	As above	As above	As above	As above

*ELVs: Emission Limit Values

Table 39.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Finland*[79]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Failure to comply with the requirements of the Act, (including those requirements set by Decrees under the Act). ***Environmental Protection Act, 86/2000 Section 84***[80]	Rectification of a violation or negligence: (1) A permit or supervisory authority may *1)* prohibit a party that violates this Act or a decree or regulation based on it from continuing or repeating a procedure contrary to a provision or regulation; *2)* order a party that violates this Act or a decree or regulation based on it to fulfil its duty in some other way; *3)* order a party as referred to in paragraphs 1 and 2 to restore the environment to what it was before or to eliminate the harm to the environment caused by the violation; *4)* order an operator to conduct an investigation on a scale sufficient to establish the environmental impact of operations if there is justified cause to suspect that they are causing pollution contrary to this Act. ***Environmental Protection Act 86/2000, Section 84 (Unofficial translation)***	Failure to comply with the requirements of the Act (including those requirements set by Decrees under the Act). ***Environmental Protection Act 86/2000, Section 116***	A fine (proportional to the perpetrators daily income) according to the Ch 2(a) of the Finnish Criminal Code or imprisonment for at most two years. If the circumstances are especially aggravated the perpetrator shall be sentenced to imprisonment for at least four month and at most six years. A corporate fine between Euros 850 and Euros 850,000. ***Chapter 48, sections 1-4, of the Penal Code 39/1889 as amended by 578/1995 and 112/2000***

[79] The Environmental Protection Decree, Section 1 Nr. 6, provides that all VOC installations listed in the Decree 435/2001 require a permit in accordance with the Environmental Protection Act (chapter 4). If there is no need for a permit, the installation must be announced for registration to the competent authority (Decree 435/2001 Sec. 4, Act Sec. 65).

Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to comply with the requirements of the Act, (including those requirements set by Decrees under the Act). ***Environmental Protection Act 86/2000, Section 84*** For example, Section 15 of the Decree 435/2001: "The operator shall, in the manner prescribed by the permit authority, prove that the installation complies with the emitted gas emission limit standards or total emission values or the reduction programme for emissions as well as other requirements prescribed in section 6" (=detailed rules on setting and applying emissions standards).	As above	As above	As above

[80] If the emission does not require an environmental permit, the activity must be announced for registration to the environmental authority (Act 86/2000 Section 65 and Decree 435/2001 Sec. 4).

Table 2.40 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Finland*[81]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to comply with the requirements of the Act (including those requirements set by Decrees under the Act). ***Environmental Protection Act, 86/2000, Section 84*** For example, Section 17 of the Decree 1017/2002: "The operator shall annually before the end of February report to the regional environmental centre and the municipal environmental protection agency the information provided in annex 3 on combustion plants, gas turbines and measures on the basis of which the following up of the provisions of this decree is possible."	Rectification of a violation or negligence: (1) A permit or supervisory authority may *1)* prohibit a party that violates this Act or a decree or regulation based on it from continuing or repeating a procedure contrary to a provision or regulation; *2)* order a party that violates this Act or a decree or regulation based on it to fulfil its duty in some other way; *3)* order a party as referred to in paragraphs 1 and 2 to restore the environment to what it was before or to eliminate the harm to the environment caused by the violation; *4)* order an operator to conduct an investigation on a scale sufficient to establish the environmental impact of	Failure to comply with the requirements of the Act (including those requirements set by Decrees under the Act). ***Environmental Protection Act 86/2000, Section 116***	A fine (proportional to the perpetrators daily income) according to the Ch 2(a) of the Finnish Criminal Code or imprisonment for at most two years. If the circumstances are especially aggravated the perpetrator shall be sentenced to imprisonment for at least four month and at most six years. A corporate fine between Euros 850 and Euros 850,000. *Environmental Protection Act (86/2000), Section 116* ***Chapter 48, Sections 1-4, of the Penal Code 39/1889, as amended by 578/1995 and 112/2000***

[81] Large Combustion plants are considered installations (see list of installations under Section 1 of the Environmental Protection Decree 169/2000) that require an environmental permit under Chapter 4 of the Environmental Act 86/2000.

		operations if there is justified cause to suspect that they are causing pollution contrary to this Act. ***Environmental Protection Act 86/2000, Section 84 (Unofficial translation)***		
Obligation to comply with the conditions set in the permit or mandatory ELVs	As above	As above.	As above	As above

Table 2.41 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Finland*[82]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Failure to comply with the requirements of the Act (including those requirements set by Decrees under the Act). ***Environmental Protection Act 86/2000, Section 84***	Rectification of a violation or negligence: (1) A permit or supervisory authority may *1)* prohibit a party that violates this Act or a decree or regulation based on it from continuing or repeating a procedure contrary to a provision or regulation; *2)* order a party that violates this Act or a decree or regulation based on it to fulfil its duty in some other way; *3)* order a party as referred to in paragraphs 1 and 2 to restore the environment to what it was before or to eliminate the harm to the environment caused by the violation; *4)* order an operator to conduct an investigation on a scale sufficient to establish the environmental impact of operations if there is justified cause to suspect that they are causing pollution contrary to this Act. ***Environmental Protection Act***	Failure to comply with the requirements of the Act (including those requirements set by Decrees under the Act). ***Environmental Protection Act 86/2000, Section 116***	A fine (proportional to the perpetrators daily income) according to the Ch 2(a) of the Finnish Criminal Code or a sentence to imprisonment for at most two years. If the circumstances are especially aggravated the perpetrator shall be sentenced to imprisonment for at least four month and at most six years. A corporate fine between Euros 850 and Euros 850,000. ***Chapter 48, Sections 1-4, of the Penal Code 39/1889, as amended by 578/1995 and 112/2000***

[82] Waste incineration plants are considered installations (see list of installations under Section 1 of the Environmental Protection Decree 169/2000) that require an environmental permit under Chapter 4 of the Environmental Act 86/2000 (See Decree 362/2003).

		86/2000, Section 84 (Unofficial translation)		
Obligation to supply information for application for permits	As above	As above	As above	As above
Obligation to notify the competent authority of any changes in the operation of an installation	As above	As above	As above	As above
Obligation to comply with the conditions set in the permits or mandatory ELVs	As above For example, pursuant to Section 20a the permit rules which are required for waste incineration plants, The requirement of BAT and the use of emissions standards are transposed in the Environmental Protection Act (section 43). Also, pursuant to Section 25 of the Decree 362/2003: "The operator of an incineration plant or a parallel incineration plant shall annually give the supervising authority a report on the operation of the installation. The report must give an account at least of the process and the emissions into air and water compared to the emission standards of this decree. The public shall have the right to access these reports. The reports will be published electronically."	As above	As above	As above

Annex IX – France

FRANCE

1. Overview of penalties related to legislation on industrial installations

Both administrative sanctions and criminal sanctions can apply for the infringement of environmental Law in France. These sanctions are not linked and can be imposed separately on the offender.

Administrative sanctions are decided by administrative authorities. These sanctions cannot constitute a deprivation of individual freedom and shall be complemented by measures to safeguard the rights and freedoms guaranteed under the French Constitution.[83] Administrative sanctions are directly enforceable and are imposed without referral to a judge. The administrative procedure is easier to put in place than the criminal one. There are different types of administrative sanctions depending on the characteristics of the environmental legislation. For instance the legal framework on classified installations contains different administrative sanctions that can be issued by the Prefect (the State's representative in a department or region) which are, the suspension of the operation, the closure or removal of the facility, the sealing of a facility, the deposit of a sum corresponding to the amount of the work to be carried out and the enforcement ex officio of the measures required. These administrative sanctions cannot be imposed without prior issue of a letter of formal notice by the Prefect.

The French Criminal Code does not encompass general sanctions related to harm made to the environment. These criminal sanctions are scattered in specific sectors of the legislation on the environment (e.g. legislation on classified installations,[84] waste,[85] water pollution,[86] air[87]). French Law provides three categories of criminal offences which are serious offences *(crimes),* offences *(délits)* and petty offences *(contravention)*. Most criminal offences related to harm made to the environment are either offences *(délits)* or petty offences *(contraventions)*. For instance infringements to certain provisions of Book V Title I of the Code of the Environment (CoE) on classified installations for the protection of the environment can lead to one year imprisonment and a fine of Euros 75,000. The amendment of the Criminal Code in 1994 established the criminal liability of legal persons in French Law. Pursuant to Article 121(2) of the Criminal Code legal persons, with the exception of the State, are criminally liable for the offences committed on their account by their organs or representatives. For instance legal persons can be criminally liable to a fine of Euros 375,000 for operating a classified installation without an authorisation.[88]

The VOC, LCP and WI Directives were transposed in French national Law by Ministerial Orders. These Orders, however, do not contain any specific sanctions related to the infringement of the transposing provisions of these Directives. All the installations that fall within the scope of these Directives shall comply with the provisions of Book V Title I of the Code of the environment (CoE) on classified installations for the protection of the environment that transposes the requirement of the IPPC Directive.[89] They shall be subject either to authorisation, registration or declaration, according to the gravity of the hazards or drawbacks their operation might present.

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[83] Decision of the Constitutional Council 89-260 DC of 28 July 1989 available at: http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/les-decisions/acces-par-date/decisions-depuis-1959/1989/89-260-dc/decision-n-89-260-dc-du-28-juillet-1989.8652.html

[84] Article L.514-9 and following of the CoE, Articles R.514-4 and R.514-5 of the CoE

[85] Article L. 541-46 and following of the CoE

[86] Article L. 216-6 and following of the CoE

[87] Article L. 226-9 and following of the CoE

[88] See Article L514-9 read in conjunction with Article L.514-18 of the CoE and Article 131 of the Criminal Code

[89] The installations covered by the legislation on classified installations are listed in the nomenclature of classified installations set by a Conseil d'Etat decree issued on the basis of a report from the Minister responsible for classified installations, after the opinion of the Higher Council for Classified Installations. This decree defines the installations as being subject to authorisation or to declaration, according to the gravity of the hazards or drawbacks their operation might present.

The requirements of the transposing provisions of the VOC, LCP and WI Directives shall be considered as being included in the operational requirements set by ministerial or prefectural orders that will have to be fulfilled by the relevant classified installations. An infringement of these operational requirements can lead to specific administrative and criminal penalties under the Title on classified installations for the protection of the environment of the CoE (Article L514-1 (I), Article R514-4 and Article L-514-11).

Regarding the infringement to the requirements of the WI Directive, Title IV of Book V of the CoE provides specific sanctions for the infringement of requirements related to the disposal of waste likely to produce harmful effects on soils, flora and fauna, to damage sites or landscapes, to pollute the air or water, to cause noise and odours and, in general, to harm human health or the environment. Pursuant to Article L-541-2 second paragraph of the CoE, the disposal of waste includes the operations of collection, transport, storage, sorting and treatment required for the recovery of reusable elements and materials or energy, as well as for the deposit or discharge into the natural environment of all other products under the conditions required to avoid the nuisances mentioned in the previous paragraph. This definition of disposal should thus include the incineration of waste. Therefore these sanctions should indirectly apply for the infringement of the requirements of the national transposition of the WI Directive.

Finally, pursuant to Article L-226-8 and 9 of the CoE (Book II Title II on air and atmosphere) industrial, commercial, agricultural or services firms that emit pollutant substances constituting atmospheric pollution[90] can be subject to sanctions. The infringement of the emission requirements under the VOC, LCP and WI Directives could thus be indirectly covered by these provisions.

The Ministry for Ecology, Sustainable Development Transport and Housing[91] is responsible for the inspection of classified installations. Under the authority of Departmental Prefects, inspection and enforcement are mainly carried out by the directorates for industry, research and the environment[92] for most industrial facilities, the departmental veterinary services[93] for farms, abattoirs, animal carcass disposal contractors and some food processing activities and the technical department of the police prefecture of Paris[94] for Paris and its surrounding area. There are around 1,500 inspectors (equivalent to 1,150 full time) −engineers, technicians and veterinary surgeons− all of whom are State officials.[95]

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in France

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

[90] Atmospheric pollution is defined by Article L.220-2 of the CoE as the introduction by man, directly or indirectly, into the atmosphere and closed spaces, of substances having detrimental consequences likely to put human health in danger, to damage biological resources and ecosystems, to influence climate change, to damage material goods, or to result in odour nuisance

[91] Ministère de l'Ecologie, du Développement durable, du Transport et du Logement

[92] Directions régionales de l'industrie, de la recherche et de l'environnement

[93] Directions départementales des services vétérinaires

[94] Service technique de la préfecture de police de Paris

[95] See the Ministry for Ecology, Sustainable Development Transport and Housing presentation brochure on 'the Inspectorate of Classified Installations Environmental policing of industrial and agricultural facilities' available at: http://installationsclassees.ecologie.gouv.fr/IMG/pdf/plaquetteIC anglais.pdf

Provisions, which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive, are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code, which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	France
IPPC Directive	
Catch-all	
4	X
5	X
6	
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	
3(2)	
4(4)	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (4)	
5	
7 (1)	
9	
10	
13	
WI Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	

10 (1)	
10 (2)	
11	
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in France. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.1 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in France*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating a facility without an authorisation or registration or declaration required. ***Article L514-2 first paragraph of the CoE***	Suspension by the prefect of the operation of the facility until the decision on the application for authorisation is issued. ***Article L514-2 first paragraph of the CoE*** If an operator fails to comply with the notice to rectify its situation or if its application for approval is refused, the prefect may, if necessary, order the closure or removal of the facility. ***Article L514-2 second paragraph of the CoE*** The prefect may proceed to the sealing of a facility that is maintained or operated in contravention of a measure of removal, closure or suspension. ***Article L514-2 third paragraph of the CoE***	<u>Without declaration</u> To operate a facility without a declaration. ***Article R.514-4 (1) of the CoE*** <u>Without authorisation or registration</u> To operate a facility without authorisation or registration: ***Article L514-9 of the CoE***	<u>Without declaration</u> Individuals: A fine of Euros: up to 1,500 Legal persons: A fine of up to Euros 7,500 ***Article R.514-4 (1) of the CoE*** <u>Without authorisation or registration</u> Individuals: - A fine of up to Euros 75,000 - Up to one year imprisonment ***Article L514-9 of the CoE*** Legal persons: A fine of up to Euros 375,000 (75,000 x 5) - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities; - Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; - Prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any

				electronic means to the public ***Article L.514-19 of the CoE*** **Complementary measures:** -The ban of the use of the facility -The rehabilitation of the premises ***Article L.514-9 IV of the CoE***
Obligation to supply information for application for permits	This is not considered an administrative offence	No sanctions	This is not considered a criminal offence	No sanctions
Obligation to notify the competent authority of any changes in the operation of an installation			Failure to notify to the Prefect, any modifications to the facility, its operation or vicinity leading to significant changes in the elements for the application of the authorisation. ***Article R514 (5) of the CoE read in conjunction with Article R512-33 of the CoE***	Individuals: A fine up to Euros 1,500 Legal persons: A fine up to Euros 7,500 ***Article R.514-4 (1) of the CoE***
Obligation to comply with the conditions set in the permit or mandatory ELVs	<u>Infringement or non-compliance with the following requirement:</u> Obligation to comply with the conditions imposed on the operator of a classified facility. ***Article L514-1 (I) of the CoE***	The Prefect issues a formal notice to the operator to comply with the said conditions by a set deadline. If, on expiry of the deadline set for performance, the operator has not complied with the said order, the Préfet may: 1° Oblige the operator to deposit with the Treasury a sum corresponding to the amount of the work to be carried out, which sum will be returned to the operator gradually as the required measures are performed; 2° Have the required measures enforced ex officio and at the expense of the operator; 3° Issue a ruling, after an opinion has been given by the competent advisory commission of the local region *(département)* suspending the operation of the facility until the conditions imposed have been fulfilled and take the necessary provisional measures.	Offences listed in Article R.514-4 of the CoE : Failure to comply with the general rules and technical regulations applicable to the installations subject to authorisation. These rules and regulations determine the appropriate measures to prevent and reduce the risks of an accident or of pollution of any kind occurring, as well as the conditions of integration of the facility into the environment and of rehabilitation of the site after operations have ceased. ***Article R514 (3) of the CoE read in conjunction with Article L512-5 of the CoE*** Failure to comply with the requirements set in the permits related to: -The effectiveness of best available techniques	<u>Penalties related to the offences listed in Article R.514-4 of the CoE</u> Individuals: A fine up to Euros 1,500 Legal persons: A fine up to Euros 7,500 ***(Article R.514-4 (1) of the CoE)*** <u>Penalties related to the offences listed in Article L514-11 of the CoE</u> Individuals: - A fine up to Euros 75,000 - Up to six months imprisonment Legal persons: - A fine up to Euros 375,000 (75,000 x 5) - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities;

		Article L514-1 (I) (1) (2) (3) of the CoE	-The quality, purpose and use of surrounding environment and the balanced management of water resources. - Emission limits based on best available techniques, within the meaning of Directive 2008/1/EC of 15 January 2008 for installations authorised by the relevant Minister. -The reduction or prevention of long range pollution and transboundary pollution -The start up, malfunction or sudden stop of the installations -The analyses and measures to control the installation and the monitoring of its effects on the environment and the conditions under which the results of these tests and measures are carried to inform the Inspectors of classified installations and services in charge of water policy. - Reporting and quantification of emissions of greenhouse gas emissions for the relevant installations ***Article R514 (3) of the CoE read in conjunction with Article R512-28 of the CoE*** Failure to comply with additional conditions proposed by inspectors of classified installations set in complementary Orders. ***Article R514 (3) of the CoE read in conjunction with Article R512-31 of the CoE*** Failure to comply with the conditions set by Ministerial Order related to the presentation of the overview of plant operation ***Article R514 (3) of the CoE read in conjunction with Article R512-45 of the***	- Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any electronic means to the public ***Article L.514-19 of the CoE*** **Complementary measures:** -The ban of the use of the facility -The rehabilitation of the premises ***Article L.514-9 IV of the CoE***

			CoE Failure to comply with the declaration requirements related to emission of pollutants and production of waste ***Article R514 (3) of the CoE read in conjunction with Article R512-46 of the CoE*** Offences listed in Article L-514-11 of the CoE The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations determined for the application of Articles L. 512-1 (e.g. requirements related to the distance from dwellings, from buildings habitually occupied by third parties, establishments receiving the public, waterways, communication routes, water catchment areas, or zones destined for dwellings by binding planning documents) ***Article L-514-11 of the CoE read in conjunction with Article L512-1 of the CoE*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations indispensable for the protection of the convenience of the neighbourhood, or for public health and safety, or for agriculture, or for the protection of nature and the environment, or for the conservation of sites and monuments or elements of the archaeological heritage, related to the means of analysis and measurement and the means of intervention in case of an incident	

			Article L-514-11 of the CoE read in conjunction with Article L512-3 The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations preventing and reducing the risks of an accident or of pollution of any kind occurring, as well as the conditions of integration of the facility into the environment and of rehabilitation of the site after operations have ceased. ***Article L514-11 of the CoE read in conjunction with Article L512-5 of the CoE*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the evaluations to be conducted or the remedies to be implemented which are rendered necessary either by the consequences of an accident or an incident occurring in the facility, or by the consequences of a failure to comply with the conditions imposed by the present Title, or by any other hazard or drawback interfering or threatening to harm the aforementioned interests. The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to particular requirements due to local circumstances set by the prefect in the registration order. ***Article L514-11 of the CoE read in conjunction with Article L512-7-3 of the CoE***	

			The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the necessary requirements set by a complementary Order of the prefect for installations that shall be registered. ***Article L514-11 of the CoE read in conjunction with Article L512-7-5 of the CoE*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the general requirements in the declaration set by the prefect. ***Article L514-11 of the CoE read in conjunction with Article L512-8 of the CoE*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the necessary specific requirements imposed by the prefect to installations subject to declaration. ***Article L514-11 of the CoE read in conjunction with Article L512-12 of the CoE*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to evaluations to be done and implementation of remedies required by the prefect that are necessary as a consequence of an accident or incident at the facility or due to the breach of conditions imposed under the legislation	

			on classified installations. ***Article L514-11 of the CoE read in conjunction with Articles L512-20 of the CoE***	

*ELVs: Emission Limit Values

Table 2.2 ***Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in France***

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Operating a facility without an authorisation or registration or declaration required. ***Article L514-2 first paragraph of the CoE***	Suspension by the prefect of the operation of the facility until the decision on the application for authorization is issued. ***Article L514-2 first paragraph of the CoE*** If an operator fails to comply with the notice to rectify its situation or if its application for approval is refused, the prefect may, if necessary, order the closure or removal of the facility. ***Article L514-2 second paragraph of the CoE*** The prefect may proceed by a law enforcement officer in the sealing of a facility that is maintained or operated in contravention of a measure of removal, closure or suspension. ***Article L514-2 third paragraph of the CoE***	<u>Without declaration</u> To operate a facility without a declaration ***Article R.514-4 (1) of the CoE*** <u>Without authorisation or registration</u> To operate a facility without authorisation or registration: ***Article L514-9 of the CoE***	<u>Without declaration</u> Individuals: A fine up to Euros 1,500 Legal persons: A fine up to Euros 7,500 ***Article R.514-4 (1) of the CoE*** <u>Without authorisation or registration</u> Individuals: - A fine up to Euros 75,000 - Up to one year imprisonment ***Article L514-9 of the CoE*** Legal persons: A fine up to Euros 375,000 (75,000 x 5) - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities; Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation

				- The posting of the ruling or distribution thereof by the press or by any electronic means to the public ***Article L.514-19 of the CoE*** **Complementary measures:** -The ban of the use of the facility -The rehabilitation of the premises ***Article L.514-9 IV of the CoE***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	See same row on IPPC tables Administrative offences related to atmospheric pollution: Infringement or non-compliance with the following requirement: Obligation to observe the provisions set out in the Title on Air and Atmosphere of the CoE or enactments and decisions for their application. ***Article L.226-8 of the CoE***	See same row on IPPC tables Administrative sanctions related to atmospheric pollution: - The deposit of a sum corresponding to the cost of the works or operations required in order to bring the property into compliance. This sum is returned progressively as the work is carried out. - Have the works or operations required to bring the property into compliance carried out ex officio and at the expense of the concerned party; - Order the suspension of the activity, the immobilisation or the interruption of the use of the equipment or machinery pending the execution of the works or operations necessary to bring them into compliance. ***Article L.226-8 of the CoE***	See same row on IPPC tables Criminal offences related to atmospheric pollution. Emission of polluting substances constituting atmospheric pollution, as defined in Article L. 220-2, in violation of an official notification. ***Article L.226-9 of the CoE***	See same row on IPPC tables Criminal sanctions related to atmospheric pollution: Individual: - A fine up to Euros 7,500 - Up to six months' imprisonment ***Article L.226-9 of the CoE*** Legal persons: - A fine up to Euros 37,500 - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities; - Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years

				- The exclusion from public tenders either permanently or for a period of five years; - prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any electronic means to the public ***Article L.226-10 of the CoE read in conjunction with Articles 131-38 and 39 of the Criminal Code***

Table 2.3 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in France*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation			Failure to notify to the Prefect, any modifications to the facility, its operation or vicinity leading to significant changes in the elements for the application of the authorisation. ***Article R.514 (5) of the CoE read in conjunction with Article R512-33 of the CoE***	Individuals: A fine up to Euros 1,500 Legal persons: A fine up to Euros 7,500 ***Article R.514-4 (1) of the CoE***
Obligation to comply with the conditions set in the permit or mandatory ELVs	See same row on IPPC tables Administrative offences related to atmospheric pollution: Infringement or non-compliance with the following requirement: Obligation to observe the provisions set out in the Title on Air and Atmosphere of the CoE or enactments and decisions for their application. ***Article L.226-8 of the CoE***	See same row on IPPC tables Administrative sanctions related to atmospheric pollution: - The deposit of a sum corresponding to the cost of the works or operations required in order to bring the property into compliance. This sum is returned progressively as the work is carried out. - Have the works or operations required to bring the property into compliance carried out ex officio and at the expense of the concerned party; - Order the suspension of the activity, the immobilisation or the interruption of the use of the equipment or machinery	See same row on IPPC tables Criminal offences related to atmospheric pollution Emission of pollutant substances constituting atmospheric pollution, as defined in Article L. 220-2, in violation of an official notification. ***Article L.226-9 of the CoE***	See same row on IPPC tables Criminal sanctions related to atmospheric pollution: Individual: - A fine up to Euros 7500 - Up to six months' imprisonment ***Article L.226-9 of the CoE*** Legal persons: - A fine up to Euros 37500 - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities; - Judicial supervision for a period of five

		pending the execution of the works or operations necessary to bring them into compliance. ***Article L.226-8 of the CoE***		years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; - prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any electronic means to the public. ***Article L.226-10 of the CoE read in conjunction with Articles 131-38 and 39 of the Criminal Code***

Table 2.4 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in France*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating a facility without the authorisation required. ***Article L514-2 first paragraph of the CoE***	Suspension by the prefect of the operation of the facility until the decision on the application for authorization is issued . ***Article L514-2 first paragraph of the CoE*** If an operator fails to comply with the notice to rectify its situation or if its application for approval is refused, the prefect may, if necessary, order the closure or removal of the facility. ***Article L514-2 second paragraph of the CoE*** The prefect may proceed by a law enforcement officer in the sealing of a facility that is maintained or operated in contravention of a measure of removal, closure or suspension. ***Article L514-2 third paragraph of the CoE***	To operate a facility without authorisation: ***Article L514-9 of the CoE***	Individuals: - A fine up to Euros 75,000 - Up to one year imprisonment ***Article L514-9 of the CoE*** Legal persons: A fine up to Euros 375,000 (75,000 x 5) - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities - Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; - prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any electronic means to the public ***Article L.514-19 of the CoE*** **Complementary measures:** -The ban of the use of the facility -The rehabilitation of the premises. ***Article L.514-9 IV of the CoE***
Obligation to supply	Not considered as an administrative offence sanction		Not considered as a criminal offence	

information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the permits or mandatory ELVs	See same row on IPPC tables Administrative offences related to atmospheric pollution: Infringement or non-compliance with the following requirement: Obligation to observe the provisions set out in the Title on Air and Atmosphere of the CoE or enactments and decisions for their application. ***Article L.226-8 of the CoE***	See same row on IPPC tables Administrative sanctions related to atmospheric pollution: - The deposit of a sum corresponding to the cost of the works or operations required in order to bring the property into compliance. This sum is returned progressively as the work is carried out - Have the works or operations required to bring the property into compliance carried out ex officio and at the expense of the concerned party; - Order the suspension of the activity, the immobilisation or the interruption of the use of the equipment or machinery pending the execution of the works or operations necessary to bring them into compliance. ***Article L.226-8 of the CoE***	See same row on IPPC tables Criminal offences related to atmospheric pollution Emission of pollutant substances constituting atmospheric pollution, as defined in Article L. 220-2, in violation of an official notification. Criminal offences related to the disposal of waste: Disposing of or retrieving waste or materials waste likely to produce harmful effects on soils, flora and fauna, to damage sites or landscapes, to pollute the air or water, to cause noise and odours and, in general, to harm human health or the environment without fulfilling the prescriptions concerning the characteristics, quantities, technical and financial conditions for handling the waste or materials, and the treatment processes used, set in the approval certificate from the administration. ***Article L.541-46 I (8)) of the CoE read in conjunction with Article L.541-22 of the CoE, Article L.541-7 of the CoE and Article L.541-2 of the CoE***	See same row on IPPC tables Criminal sanctions related to atmospheric pollution: Individuals: - A fine up to Euros 7,500 - Up to six months' imprisonment ***Article L.541-46*** Legal persons: - A fine up to Euros 37,500 - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities - Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; - prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any electronic means to the public

				Article L.226-10 of the CoE read in conjunction with Articles 131-38 and 39 of the Criminal Code <u>Criminal sanctions related to the infringement on the requirements related to the disposal of waste</u>: Individuals: - A fine up to Euros 75,000 - Up to two years of imprisonment ***Article L.541-46 of the CoE*** Legal persons: - A fine up to Euros 375,000 - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities; - Judicial supervision for a period of five years - The final closure or a suspension of the installation for a period of five years - The exclusion from public tenders either permanently or for a period of five years; - prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation - The posting of the ruling or distribution thereof by the press or by any electronic means to the public ***Articles L.541-46 and 47 of the CoE read in conjunction with Articles 131-38 and 39 of the Criminal Code*** **Complementary measures:** - The temporary or total closure of the installation

				- The rehabilitation of the places harmed by waste not treated under the conditions required by the Law. - The posting of the ruling or distribution thereof by the press or by any electronic means to the public. ***Articles L.541-46 of the CoE***

Annex X– Germany

GERMANY

1. Overview of penalties related to legislation on industrial installations

In Germany, sanctions for the infringement of provisions relating to industrial installations consist of administrative criminal sanctions, criminal sanctions and administrative enforcement measures. While administrative criminal sanctions and administrative enforcement measures are regulated in the legislation transposing Directives 2008/1/EC, 1999/13/EC, 2001/80/EC and 2000/76/EC, the criminal sanctions are laid down in the German Criminal Code, in the section on environmental criminal law.

Administrative criminal sanctions are classified as such because they are conditional upon the offender's negligence or intent. Their aim is not to restore legality or to prevent danger but to have deterrent and preventive effects and to convict the perpetrator for a wrongdoing.

Administrative criminal sanctions for infringements of obligations relating to the permit procedure for industrial installations in the meaning of the four Directives are regulated by the Federal Immission Control Act (BImSchG). The Federal Immission Control Act[96] is Germany's primary legislation for emission control and primarily transposes Directive 2008/1/EC. All installations that are listed in the Ordinance on Installations Requiring a Permit (4.BImSchV) are subject to the permit procedure of the Federal Immission Control Act.[97] All installations that fall under the scope of Directives 2008/1/EC, 2001/80/EC and 2000/76/EC and some installations that fall under the scope of Directive 1999/13/EC are listed in this Ordinance. Operations of installations falling under the scope of Directive 1999/13/EC that are not listed in this Annex, must be notified to the competent authority §5(2), when they exceed the emission limit values set out by Ordinance on the Limitation of Emissions of Volatile Organic Compounds (31.BImSchV) transposing Directive 1999/13/EC. In addition, the German federal states (Länder) have adopted sanctions for the infringement of obligations that are not covered by the Federal Law. However, since the federal law covers the main obligations of the abovementioned Directives, these sanctions are not included in this overview.

On the basis of the Federal Immission Control Act, the Federal Government has adopted the following Ordinances that transpose the substantial requirements of Directive 1999/13/EC, 2001/80/EC, and 2000/76/EC, including their relevant sanctions:

1. Ordinance on the Limitation of Emissions of Volatile Organic Compounds (31.BImSchV) transposing Directive 1999/13/EC;
2. Ordinance on Large Combustion plants and Gas Turbine Installations (13.BImSchV) transposing Directive 2001/80/EC;
3. Ordinance on Waste Incineration and Co-Incineration (17.BImSchV) transposing Directive 2000/76/EC.

Sanctions for infringements of obligations in relation to the unlawful discharge of waste water from the cleaning of exhaust gases is regulated in the federal Water Management Act (WHG) and in the laws of the states (Bundesländer), each transposing the provisions related to waste water of Directive 2000/76/EC. Not all states lay down sanctions for infringements of these obligations.

Only IPPC- landfills do not fall under the scope of the Federal Immission Control Act (BImSchG). The sanctions for infringements of the substantial requirements for landfills are regulated in the Landfill Ordinance (DepV) and the sanctions for non-compliance with the permit procedure are regulated in the Act for Promoting Closed Substance Cycle Waste Management and Ensuring

[96] The German law uses the term "immission" to underline that the BImSchG focuses on the protection of goods, including humans, animals and the environment, exposed to immission. However, this protection is provided by the control of emissions from installations.
[97] IPPC-landfills are not listed in this Annex.

Environmentally Compatible Waste Disposal – the Waste Management Act (KrW-/AbfG). Other waste management facilities fall under the scope of the Waste Management Act, however, the relevant provision (§ 31(1) KrW-/AbfG) cross-refers to the Federal Immission Control Act that provides for the applicable sanctions. IPPC-installations that fall under the scope of the Federal Mining Act (BBergG) are additionally subject to the Federal Immission Control Act that again provides for the applicable sanctions.

The procedure for the prosecution and litigation of an administrative criminal offence (Ordnungswidrigkeit) is regulated in the national Administrative Offence Act (Gesetz über Ordnungswidrigkeiten – OWiG). According to this law the minimum fine is five Euros. Each administrative law respectively identifies the maximum fine for the commitment of a specific offence. The amount of the fine imposed on the perpetrator for committing a specific offence is determined by an assessment of the level of guilt of the perpetrator (§ 17 OWiG). If the convict does not pay the fine and provided they are not bankrupt, the competent court can arrest this person for a maximum of six weeks in case of one offence and a maximum of three months in case of the perpetration of various offences to enforce the payment of the fine. However, this measure only serves to enforce the punishment and is not a measure of punishment.

The authorities competent for prosecuting and sanctioning administrative criminal offences vary between states. In many cases, the competent authorities responsible for emission control are also the competent authorities for the prosecution of related offences. These are authorities of the states or municipalities. Appeals must be lodged at the local criminal courts (§ 68 OWiG).

The competent authority has a number of different options to restore legality if an operator of an installation infringes his obligations. The authority can issue an administrative order that requires the operator of an installation requiring a permit to comply with legal obligations (§ 17 BImSchG). Under specific conditions, the authority is entitled to close the installation, for example if it is operated without a permit (§ 20 BImSchG). As a further measure, the competent authority can withdraw the permit, e.g. if the operator does not comply with obligations set out in the permit or if the conditions for granting the permit are no longer met (§ 21(1) no.2 and no.3 BImSchG). If an installation is not subject to a permit, the authority is entitled to require the operator to comply with the legal obligations, and in case of further non-compliance can close the installation (§ 25(1) BImSchG).

The administrative laws transposing the four Directives do not provide for criminal sanctions. The section on environmental criminal law (§ 324-330d StGB) of the national Criminal Code provides for criminal sanctions. Article 327(2) no.1, (3) of this Code specifically sanctions the operation of installations within the meaning of the Federal Immission Control Act (BImSchG) transposing the four Directives without a permit or against an enforceable administrative order. Additionally, this section contains general sanctions for the infringement of regulatory administrative provisions that lead to negative impacts on the environment.

According to § 327(2) no.1, (3) of the Criminal Code, the operation of a facility in the meaning of the Federal Immission Control Act that requires a permit and which is operated without a permit or contrary to an enforceable prohibition[98] as well as the operation of such a facility that does not require a permit (the operation of which has been prohibited in order to prevent danger) shall be punished. In case of an intentional perpetration of this offence the sanction is imprisonment of a maximum of three years or a maximum fine of 360 daily units[99] and where legal persons are liable for their representatives up to an amount of Euros 1,000,000. In case of a negligent perpetration of this offence

[98] This prohibition must refer to the infringement of an essential obligation (See Fischer, Thomas, commentary to the Criminal Code, 57 edition 2010, § 327 recital 12.. Conditions included in the permit stipulating mandatory emission limit values must be construed as essential obligation.

[99] Taking into account the personal guilt of the perpetrator of a criminal offence, the court decides on the number of daily units with which to punish the perpetrator. The level of payment in relation to one daily unit depends on various circumstances, e.g. the income of the perpetrator.

the sanction is imprisonment of maximum two years or a maximum fine of 360 daily units and where legal persons are liable for their representatives up to an amount of Euros 500,000. The same sanction applies to operators that run a landfill in the meaning of the Waste Management Act without a permit or contrary to enforceable provisions (§ 327(2) no.3, (3) of the national Criminal Code).

The first variant of § 327(2) no.1 of the Criminal Code sanctions the operation of an installation falling under the scope of the Federal Immission Control Act requiring a permit, without a permit. This includes the operation of an installation without a permit after this installation has been subject to substantial changes.[100] Taking into account the fact that almost all national permit procedures for installations falling under the scopes of the four Directives are regulated in the Federal Immission Control Act, the first variant of § 327(2) no.1 of the Criminal Code is applicable to almost all installations falling under the scope of these Directives which require a permit. The second variant of 327(2) no.1 of the Criminal Code applies to those installations which do not require a permit within the meaning of the Federal Immission Control Act. The operation of these installations is sanctioned if the operation is contrary to an administrative prohibition that aims to prevent a danger. The operation of installations falling under the scope of the Ordinance on the Limitation of Emissions of Volatile Organic Compounds (31.BImSChV) transposing Directive 1999/13/EC and not requiring a permit can be subject to this criminal sanction.

Additionally, German environmental criminal law contains a number of provisions (§ 324-330d StGB) that aim to protect the environment, in particular human beings, fauna and flora, soil and air and which sanction the violation of administrative provisions if these violations lead to negative impacts on the environment. In relation to air emission prevention, reduction and control, § 325 of the Criminal Code is of particular relevance.[101]

In accordance with § 325(1) of the Criminal Code the operation of an installation in violation of duties under administrative law that cause alterations of the air which are capable of harming the health of human beings, animals, plants or other property of significant value outside the area belonging to the installation shall be liable to imprisonment of a maximum of five years or a maximum fine of 360 daily units in case of an intentional perpetration and of imprisonment of a maximum of three years or a maximum fine of 360 daily units in case of a negligent perpetration (liability of legal persons for intentional perpetration: maximum fines of Euros 1,000,000/ liability of legal persons for negligent perpetration: Euros 500,000). In accordance with § 325(2) of the Criminal Code the same sanction applies to any person who in gross violation of duties under administrative law, releases harmful substances in significant amounts into the air outside the grounds of the facility.

It is noteworthy that environmental criminal law is marked by the principle of administrative accessoriness and in accordance with this principle its offences (except for § 330a StGB) are only punishable under the condition that the perpetrator violates an administrative obligation, e.g. operates an installation without a permit. The legitimacy of the application of this principle is controversially discussed in Germany.[102] However, in accordance with the opinion of the national courts and the majority of legal scholars[103] the application of this principle does not breach the constitution and is necessary. Eventually, it should be mentioned that Germany is in an early stage of the legislative process to amend the environmental criminal law in order to transpose Directive 2008/99/EC. However, it is too early to assess how this amendment will change the actual provisions.

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[100] See Fischer, Thomas, commentary to the Criminal Code, 57 edition 2010, § 327 recital.12.

[101] This provision is not indicated in the tables below. Note that the procedure in relation to the prosecution of criminal offences and the court procedure are regulated in the German Code of Criminal Procedure (StPO). The judge determines the amount of one daily unit taking into account the economic background of the convict. The amount of one daily unit is minimum 1,-- and maximum 30.000,-- Euros.

[102] However, in accordance with the opinion of the national courts and the majority of legal scholars[102] the application of this principle does not breach the constitution and is necessary.

[103] See Thomas Fischer, commentary to the Criminal Code, 57 edition 2010, prior to § 324 recital .6

The procedure in relation to the prosecution of criminal offences and the court procedure are regulated in the German Code of Criminal Procedure (StPO). The StPO contains rules for the determination of the correct sanction. Instead of imprisonment the judge is also entitled to impose fines on the convict. Fines are calculated in daily units. The judge can impose a minimum of 5 and a maximum of 360 daily units. The number of daily units imposed on the convict depends on the level of guilt that is reflected in the perpetration of the offence. The judge determines the amount of one daily unit taking into account the economic background of the convict. The amount of one daily unit is a minimum of Euro 1 and a maximum of Euros 30,000.

Legal persons, associations and partnerships are liable for the commission of administrative and criminal offences committed by their authorised representatives or managers. This is regulated in §30 of the national Administrative Offences Act (OWiG). A fine can be imposed on legal persons, associations and partnerships if their authorised representatives or managers commit a criminal or administrative offence that infringes obligations addressed to these bodies or by which they are enriched. In case of an intentional offence the fine amounts to a maximum of Euros 1,000,000 and in case of a negligent offence the fine amounts to a maximum of Euros 500,000. If the authorised representative or manager commits an administrative offence, fines incurred by this commitment match the fines that may follow the perpetration of an administrative offence committed by a natural person as laid down by each administrative law. If the competent administrative or prosecution authority does not initiate a procedure against the authorised representatives or managers, if the procedure against them is closed or if the administrative authority or the court abstains from imposing a penalty on them, a fine can be independently imposed on the legal persons, associations and partnerships. The independent imposition of a fine is prohibited, if the offence cannot be prosecuted for legal reasons.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Germany

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Germany
IPPC Directive	
Catch-all	-
4	X
5	X
6	X

12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VoC Directive	
Catch-all	-
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	-
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (4)	-
5	-
7 (1)	X
9	-
10	X
13	-
WI Directive	
Catch-all	-
4 (1)	X
4 (2)	-
4 (8)	X
5 (1)	-
5 (2), (3) & (4)	-
6	X
7	X
8 (1)	X
8 (4)	X[104]
8 (5)	X[105]
8 (7)	-
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	-
13 (4)	-

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Germany. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;

[104] The legislative power to transpose this Article is vested in the states (Bundesländer). Not all Bundesländer sanction infringements of the transposing legislation.
[105] See above.

- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.42 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Germany*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Intentional/ negligent construction of or making substantial changes to IPPC installations that require a permit under the Federal Immission Control Act without permit. ***§ 62(1) no.1 and (3) in conjunction with § 4 and § 16 Federal Immission Control Act BImSchG*** Construction of or substantial changes to landfills without plan approval. ***§§ 61(1) no.2a, § 31(2) of the federal Waste Management Act (KrW-/AbfG)*** Discharge of waste water from installations without a permit. ***§ 41(1) no.1 of the Federal Water Act.***	Maximum fine of Euros 50,000/25,000, identical fines for legal persons. Maximum fine of Euros 50,000/25,000, identical fine for legal persons. Maximum fine of Euros 50,000/25,000 identical fine for legal persons.	Intentional/ negligent operation of or substantial change to an IPPC installation. ***§ 327(2) no.1 and no.3, (3) StGB***	Maximum imprisonment of 3 years or a maximum fine of 360 daily units/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ Euros 500,000.
Obligation to supply information for application for permits	Obligation to provide specific information for permit application under the Federal Immission Control Act. ***§§ 4, 4a of the Federal Ordinance on the Permit Procedure (9.BImSchV)*** Obligation to provide information within the plan approval procedure for landfills on the one hand and mining facilities and mining waste facilities that are subject to an Environmental Impact assessment on the other hand. ***§§ 73(1) of the Administrative Procedure Acts of the Lander***	The infringement of these obligations does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit.	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an	Intentional/ negligent non-notification, incorrect, incomplete or late notification of any changes to an installation that requires a permit under the Federal Immission	Maximum fine of Euros 10,000/5,000, identical fine for legal persons.	N/A	N/A

installation	Control Act (not for landfills). ***§ 62 (2) no.1 and (3) in conjunction with § 15(1) BImSchG***			
Obligation to comply with the conditions set in the permit or mandatory ELVs	<u>IPPC-installations (without IPPC-landfills):</u> Intentional/ negligent non-compliance, incorrect, incomplete or belated compliance with enforceable conditions or obligations set in the permit or with subsequent administrative acts that are aimed to enforce the compliance with the requirements of the BImSchG for IPPC installation. ***§ 62(1) no.3 and (3) in conjunction with 12(1) BImSchG; § 62(1) no. 5 and (3) in conjunction with § 17 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons.	Intentional/ negligent violation of essential requirements of the permit for an IPPC installation. ***§ 327(2) no.1 and no.3, (3) StGB***	Maximum imprisonment of 3 years or a maximum fine of 360 daily units/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000.
	To non- incorrectly, incompletely or lately inform inspectors; non-toleration of inspections, non- provision of documents for inspectors in case of inspections; to reject that the inspectors take samples in case of inspections or that they scrutinise the level of emissions. ***§ 62(2) no.4 and no.5 in conjunction with § 62 (3) and § 52 BImSchG***	Maximum fine of Euros 10,000/5,000 identical fine for legal persons.		
	Non-reporting of the results of the measurements of the emissions or non-storing of recordings based on the results of the measuring devices. ***§ 62(2) no. 3 and (3) in conjunction with § 31 sentence 1 BImSchG***	Maximum fine of Euros 10,000/5,000 identical fine for legal persons.		
	Non- , incorrect, incomplete or late reporting to the authority that an accident has taken place (mainly transposes Seveso II Directive). ***§ 21(1) no.15 and § 19(1) and (2) of the Major Accident Ordinance in***	Maximum fine of Euros 25,000/12.500, identical fine for legal persons.		

	conjunction with § 62(1) no.2 and (3) of the BImSchG			
	<u>IPPC-landfills:</u> Non-compliance with conditions set in the permit for a landfill or with administrative acts. ***§§ 61(1) no.2b, 32(4) KrW-/AbfG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons.		
	Non-information of the authority in case of exceedance of the emission thresholds that trigger the obligation of the operator of the landfill to inform the competent authority, ***§ 27(1) no.27 of the Landfill Ordinance (DepV) in conjunction with § 61(1) no.5 KrW-/AbfG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons.		
	Non-reporting to the authority on accidents that lead to a significant malfunction of the landfill operation. ***§ 27(1) no.32 of the DepV in conjunction with § 61(1) no.5 of the KrW-/AbfG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons.		
	Non-, incorrect, incomplete or late provision of information on landfills and their operation, if requested for by inspectors. ***§ 61(2) no.3 and (3) KrW-/AbfG***	Maximum fine of Euros 5,000/10,000, identical fine for legal persons.		
	To prohibit inspectors from entering the installation, premises or accommodation, auditing operating documents or carrying out technical measurements. ***§ 61(2) no.4 and (3) KrW-/AbfG***	Maximum fine of Euros 5,000/10,000 identical fine for legal persons.		

Table 43.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Germany*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Intentional/ negligent construction of or making substantial changes to installations without the required permit. under the Federal Immission Control Act. ***§ 62(1) no.1, § 4 and § 16 BImSchG*** Carrying out an activity which exceeds ELVs by and making substantial changes to installations not requiring a permit under the Federal Immission Control Act without notification, with incorrect or late notification. ***§ 12(2) no.2 of the 31.BImSchV in conjunction with § 62(1) no.7 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fines for legal. Maximum fine of Euros 50,000/25,000, identical fines for legal persons. ***§ 62(3) BImSchG***	Intentional/ negligent operation of or substantial changes to installations requiring a permit under the Federal Immission Control Act without a permit. ***§ 327(2) no.1 and (3) StGB***	Maximum imprisonment of 3 years or a fine/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000. ***§ 327(2) no.1 and (3) StGB***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirements (both intentionally or by negligence): Obligation to comply with enforceable conditions or obligations set in the permit for installations requiring a permit under the Federal Immission Control Act, in a correct, concrete and timely manner. ***§ 62(1) no.3 and § 12(1) BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons ***§ 62(3) BImSchG***	Intentional/ negligent violation of enforceable prohibitions (including ELVs set in the permit) in relation to installations requiring a permit under the Federal Immission Control Act. In case of installations not requiring a permit under this Act, the operation of these installations must have been prohibited beforehand in order to prevent danger. ***§ 327(2) no.1 and (3) StGB***	Maximum imprisonment of 3 years or a maximum fine of 360 daily units/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000. ***§ 327(2) no.1 and (3) StGB***

	Obligation to comply with ELVs set in the 31.BImSChV. ***§ 12(1) no.3 of the 31.BImSchV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to prepare a report sta stating the results of mandatory monitoring activities in relation to installations requiring a permit under the Federal Immission Control Act, in a correct, complete and timely manner. ***§ 12(1) no.6 of the 31.BImSchV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to prepare a report stating the results of mandatory monitoring activities in relation to installations not requiring a permit under the Federal Immission Control Act, in a correct, complete and timely manner. ***§ 12(2) no.8 of the 31.BImSchV in conjunction with § 62(1) no. 7 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to take a measure to restore compliance with requirements of the 31.BImSchV after non-compliance has been identified in relation to an installation requiring a permit under the Federal Immission Control Act. ***§ 12(1) no.7 of the 31.BImSchV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to notify to the competent authority of any identified non-compliance with 31.BImSchV of the operation of installations requiring or not requiring a permit under Federal Immission Control Act.	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		

	§ 12(2) no.6 of the 31.BImSchV in conjunction with § 62(1) no.2 and no.7 BImSchG			

Table 2.44 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Germany*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes to an installation - that requires permit under the Federal Immission Control Act-without notification (intentional/negligent), incorrectly, incompletely or with delay. ***§ 62 (2) no.1 and § 15(1) BImSchG***	Maximum fine of Euros 10,000/5.000, identical fine for legal persons. ***§ 62(3) BImSchG***		
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements (both intentionally or by negligence): Obligation to comply with enforceable conditions or obligations set in the permit for installations requiring a permit under the Federal Immission Control Act, in a correct, concrete and timely manner. ***§ 62(1) no.3 and § 12(1) BImSchG*** Obligation to comply with mandatory ELVs set in the 13.BImSChV. ***§ 24(1)no.1 of the 13.BImSchV in conjunction with § 62(1) No.2 BImSchG*** Obligation to comply with provisions of the 13.BImSchV setting requirements in case of a malfunction of exhaust gas cleaning devices. ***§ 24(1) no.2-5 of the 31.BImSchV in***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG*** Maximum fine of Euros 50,000/ 25,000, identical fine for legal persons. ***§ 62(3) BImSchG*** Maximum fine of Euros 50,000/ 25,000, identical fine for legal persons. ***§ 62(3) BImSchG***	Intentional/ negligent violation of enforceable prohibitions (including ELVs set in the permit) in relation to installations requiring a permit under the Federal Immission Control Act. ***§ 327(2) no.1 and (3) StGB***	Maximum imprisonment of 3 years or a maximum fine of 360 daily units/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000. ***§ 327(2) no.1 and (3) StGB***

	conjunction with § 62(1) no.2 BImSchG			

Table 2.45 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Germany*

	Administrative criminal		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Intentional/ negligent construction of or making substantial changes to installations without the required permit. under the Federal Immission Control Act. c***§ 62(1) no.1, § 4 and § 16 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fines for legal persons. ***§ 62(3) BImSchG***	Intentional/ negligent operation of or substantial changes to installations requiring a permit under the Federal Immission Control Act without a permit. ***§ 327(2) no.1 and (3) StGB***	Maximum imprisonment of 3 years or a fine/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000. ***§ 327(2) no.1 and (3) StGB***
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to provide specific information for permit application. ***§ 4 and § 4a of the Ordinance on the Permit Procedure (9.BImSchV)***	The infringement of this obligation does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit.	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out changes to an installation - that requires permit under the Federal Immission Control Act-without notification (intentional/negligent), incorrectly, incompletely or with delay. ***§ 62(2) no.1 and § 15(1) BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
Obligation to comply with the conditions set in the permits or mandatory ELVs	Intentional/ negligent discharge of waste water[106] from the cleaning of exhaust gases without a permit. ***§ 41(1) no.1 of the federal Water Management Act*** Infringement or non-compliance with the following requirements (both intentionally or by negligence): Obligation to comply with enforceable conditions or obligations set in the permit for installations requiring a permit under the Federal Immission	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 41(2) of the federal Water Management Act*** Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***	Intentional/ negligent violation of enforceable prohibitions (including ELVs set in the permit) in relation to installations requiring a permit under the Federal Immission Control Act. ***§ 327(2) no.1 and (3) StGB***	Maximum imprisonment of 3 years or a fine/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000. ***§ 327(2) no.1 and (3) StGB***

[106] Some states (Bundesländer) also sanction the infringement of other obligations related to the discharge of waste water, e.g. obligations on the control of waste water and public information.

	Control Act, in a correct, concrete and timely manner. ***§ 62(1) no.3 and § 12(1) BImSchG***			
	Obligation to comply with requirements on the construction or operation of incineration and co-incineration installations, requirements on the allowed minimum temperature and its measurement and requirements on the operation of burners and automatic devices. ***§ 21(1) no.1a-c of the 17.BImSchV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to respect (not exceed) the emission values set for incineration (§ 5 17.BImSchV) and co-incineration plants (§ 5a 17.BImSChV) in the 17.BImSchV. ***§ 21 no.1d of the 17.BImSchV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to collect separately the residues or non-use of closed containers for transportation or interim storage of residues. ***§ 21 no.2 of the 17.BImschV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to comply with provisions of the 17.BImSchV dealing with mandatory measurements and the submission of reports. ***§ 21 no.1e, 4, 6 and 8 of the 17.BImSchV in conjunction with § 62(1) no.2 BImSchG***	Maximum fine of Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		
	Obligation to comply with provisions	Euros 50,000/25,000, identical fine for		

	on information of the public. ***§ 21 no. 10 of the 17.BImSchV in conjunction with § 62(1) no.2 BImSchG*** Obligation to notify the competent authorities of operation conditions in a correct, complete and timely manner. ***§ 21 no. 10 of the 17.BImSchV in conjunction with § 62(1) no.2 BImSchG***	legal persons. ***§ 62(3) BImSchG*** Euros 50,000/25,000, identical fine for legal persons. ***§ 62(3) BImSchG***		

Annex XI– Greece

GREECE

1. Overview of penalties related to legislation on industrial installations

Greece has general provisions for breaches of legislation relating to industrial installations. Law 1650/1986 on Environment Protection (as amended by L. 3010/2002 *"Harmonisation of Law 1650/1986 with Directives 97/11/EC and 96/61/EC*") provides for general criminal, administrative and civil liabilities and penalties for breaches of environmental laws and permits. Sanctions for infringement to the national legislation transposing the directives on industrial installations are set up through or by reference to the Law on Environment Protection as follows:

IPPC Directive - is transposed by the Law on Environment Protection (L.1650/1986) and sanctions are set by Articles 28-30 of L.1650/1986, as amended by Law 3010/2002 (OJ A 91/2002).

VOC - Directive 1999/13/EC has been transposed in the Greek legal order by Joint Ministerial Decision 11641/1942/2002 (OJ B832/2.07.2002) "On measures and conditions for the limitation of VOCs arising from the use of organic solvents in certain activities and installations". The penalty provisions are provided in Article 11 of the aforementioned JMD, which makes cross reference to articles 28-30 of L. 1650/1986.

LCP Directive - The penalty provisions pursuant to Article 16 of the Directive are transposed by Article 14 of JMD 29457/1511/2005 (OJ B992/2005) which makes cross-reference to Articles 28-30 of L.1650/1986, as amended by article 4 of L. 3010/2002.

WI Directive - Article 19 of the Directive referring to the imposition of sanctions is transposed by Article 15 of JMD 22912/1117/2005 (OJ B 759/2005) which makes cross-reference to Articles 28-30 of L.1650/1986.

Administrative bodies may propose sanctions and penalties if a breach is identified. Article 30 of Law 1650/1986 provides for administrative sanctions in the form of a fine for any natural or legal persons that cause pollution or other degradation of the environment or who violates the provisions of the relevant legislation, independently of civil or penal responsibility. The fine is imposed according to the severity of the infringement, the frequency, the relapse, the amount by which the limits were exceeded and the violation of environmental terms, of Euros 50 to 500,000 per organisation depending on the competent authority involved. Depending on the level of the fine, the competent authority is the Prefect, the Secretary General of the Region, or the Ministry of Environment, Energy and Climate Change.

Article 28 Law 1650/1986, provides for criminal sanctions including fines and imprisonment, for pollution or carrying out an activity/enterprise without a necessary permit, including imprisonment of between three months and two years. A failure to comply with permit conditions pursuant to Article 4 may also result in imprisonment for a period of 3 months to 2 years, or a fine or both, because of environmental pollution. Article 28(1) sets up offences for causing pollution or degrading the environment with action or omission that infringe the provisions of this law or published decrees and ministerial or prefectoral decisions adopted pursuant to this law or b) practises activity or enterprise without the required authorisation or approval or exceeds the limits of authorisation or approval and degrades the environment. Article 28 (1)-(6) of Law 1650/1986 establishes the following sanctions:
1) Imprisonment for a period of 3 months to 2 years, and a monetary penalty, because of environmental pollution. The amount of the fine is set by Article 57 of the Criminal Code and ranges from Euros 150 to 15,000.
2) In case of negligence, imprisonment up to one year.
3) With regard to the crimes of paragraph 1, if by the type or the quantity of pollutants or by the extent and the importance of degradation of the environment, danger of death or heavy bodily damage was caused, imprisonment of at least one year and a monetary penalty can be imposed. In case of heavy

bodily damage or death, imprisonment up to ten years is imposed. If the heavy bodily damage or the death concerns a foetus, imprisonment of at least two years and a monetary penalty can be imposed.
4) In case the pollution or other degradation of the environment results of the activity of a legal person, liability under civil law for the entire payment of the pecuniary sentence.
5) Chairmen of boards/ CEOs of limited companies/ Managing directors/ Administrators/ Managers of legal person are punished as perpetrators independently from other individuals' criminal responsibility and the legal person's civil responsibility, provided that, deliberately or by negligence, they did not comply with the legal obligation to supervise the application of this law provisions.
6) If the offender, willingly and before being interrogated for his action limits significantly the pollution or other degradation of the environment or by timely notice to the authority contributes effectively to the essential reduction of the impact, the court can decide a reduced sentence or exempt him from any sentence.

As specified above, the liabilities are the same for natural as for legal persons.

For all industrial installations covered by this study, the Environmental Inspectorate set up by Law 2947/2001 and by Presidential Decree 165/2003 is responsible for inspecting and monitoring implementation of and compliance with environmental conditions and recommending the imposition of sanctions in cases of infringement. On the basis of the inspection, the environmental inspector prepares a report, which includes infringements of the legislation or the environmental conditions. In case of such infringements, the offender is served a notice and must explain and justify the infringement within a given deadline. Once the offender's response has been received or the deadline has expired, the environmental inspector issues a reasoned statement confirming or not the infringement.

A copy of this statement is dispatched to the permitting authority and to the competent public prosecutor to examine whether there is any criminal liability involved.

The Environmental Inspectorate operates on a horizontal level, thus having the competence to inspect any public or private project and industrial or other activity.

According to Article 6 of Law 3818/2010 (OJ A 17/2010), a new Special Secretary is funded within the Ministry of Environment, Energy and Climate Change, under the title "Special Secretary of Energy and Environmental Inspections". The new Special Secretary incorporates the Environmental Inspectorate, the Coordinating Bureau for the Prevention and Remediation of Environmental Damage and the Consulting Committee for the Prevention and Remediation of Environmental Damage. The Coordinating Bureau and the Consulting Committee are responsible for the implementation of the Presidential Decree 148/2009, which transposes in Greece the Environmental Liability Directive (Directive 2004/35/EC). This new administrative restructure does not alter at all the competencies of the Environmental Inspectorate.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Greece

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions, which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive, are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code, which imposes sanctions for pollution of the environment. In Greece, Article 28 Law 1650/1986 establishes such general sanctions.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Greece
IPPC Directive	
Catch-all	C
4	
5	
6	
12 (1)	
12 (2)	
14 (a)	
14 (b)	
14 (c)	
VOC Directive	
Catch-all	C
3(2)	
4(4)	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (3)	
4 (4)	
5	
7 (1)	
9	
10	
13	
WI Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	
10 (1)	
10 (2)	
11	
12 (2)	

13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Greece. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.1 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Greece*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	To natural or legal persons that cause pollution or other degradation of the environment or violate the provisions of this law or published decrees or ministerial or regional or prefectoral decisions, as well as the offenders of terms and measures that are determined with the administrative acts foreseen in articles 11 and 12 of the Laws 1515/1985 (FEK 18 A') and 1561/1985 (FEK 148 A'), independently of civil or penal responsibility. ***L. 1650/1986, art. 30 (par.1), as amended by art. 4 of Law 3010/2002***	A penalty of Euros 50 to 500,000 per organisation, depending on the gravity of infringement, frequency, the relapse, the overshooting of enacted limits of emissions and the violation of environmental terms. ***L. 1650/1986 art. 30 (par.1), as amended by article 4 of Law 3010/2002*** Temporary cessation of activities or definitive cessation of operation of the installation where the enterprise fails or refuses to comply with recommended measures or if the taking of such measures is not feasible at the said installation. If due to the type, quantity of pollutants or the extent of environmental degradation there is a risk of death, serious bodily harm or ecological disaster, the Minister for the Environment may directly impose the temporary or permanent cessation of operation. Together with the Decision for the Cessation, a fine can be threatened, ranging from Euros 29 to 2,900, for each day that the operation continues to operate, despite the Cessation Decision. ***L. 1650/1986 art. 30 (par.2)***	See in the introduction	See in the introduction
Obligation to supply information for application for permits	As above	As above	As above	As above
Obligation to notify the competent authority of	As above	As above	As above	As above

any changes in the operation of an installation	.			
Obligation to comply with the conditions set in the permit or mandatory ELVs	As above	As above	As above	As above

*ELVs: Emission Limit Values

Table 2.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Greece*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	1. To any person who causes pollution or other degradation of the environment by act or omission, or violates the provisions of this Decision, is subject to the administrative, civil and penal sanctions provided by articles 28, 29 and 30 of Law 1650/1986, as this has been amended by article 98 (par. 12) of Law 1892/1990, and as these article are at any time in force. independently of civil or penal responsibility. 2. The aforementioned sanctions are imposed independently from other sanctions which may exist in other provisions of the legislation in force. ***JMD 11641/1942/2002, art. 11*** To natural or legal persons that cause pollution or other degradation of the environment or violate the provisions of this law or published decrees or ministerial or regional or prefectoral decisions, as well as the offenders of terms and measures that are determined with the administrative acts foreseen in articles 11 and 12 of the Laws 1515/1985 (FEK 18 A') and 1561/1985 (FEK 148 A'), independently of civil or penal responsibility. ***L. 1650/1986, art. 30 (par.1), as amended by art. 4 of Law 3010/2002***	A penalty of Euros 50 to 500,000 per organisation, depending on the gravity of infringement, frequency, the relapse, the overshooting of enacted limits of emissions and the violation of environmental terms. ***L. 1650/1986 art. 30(par.1), as amended by article 4 of Law 3010/2002*** Temporary cessation of activities or definitive cessation of operation of the installation where the enterprise fails or refuses to comply with recommended measures or if the taking of such measures is not feasible at the said installation. If due to the type, quantity of pollutants or the extent of environmental degradation there is a risk of death, serious bodily harm or ecological disaster, the Minister for the Environment may directly impose the temporary or permanent cessation of operation. Together with the Decision for the Cessation, a fine can be threatened, ranging from Euros 29 to 2,900, for each day that the operation continues to operate, despite the Cessation Decision. ***L. 1650/1986 art. 30 (par.2)***	See in the introduction	See in the introduction
Obligation to supply information for application for permits				
Obligation to notify the				

competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	As above	As above	As above	As above

Table 2.3 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Greece*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Causing infringement of the provisions of this decision by action or omission, the penal, civil and administrative sanctions provided for in articles 28, 29 and 30 of Law 1650/1986, as the latter article was amended by article 98 (par.12) of Law 1982/1990 (A 101) and then by article 4 of Law 3010/2002, are imposed. ***JMD 29457/2005, art.14 (1)*** Especially for the imposition of administrative sanctions in the areas of urban plans of Athens and Thessaloniki, the provisions of Article 13 of Law 1515/1985 and of article 13 of Law 1561/1985 as amended and supplemented by article 31 (par. 6 and 7) respectively of Law 1650/1986. ***JMD 29457/2005, art.14 (2)*** 3. The sanctions provided for in the previous paragraphs (1 and 2) are imposed regardless of the sanctions provided for issues that this decision affects in other provisions of the applicable legislation. ***JMD 29457/2005, art.14 (3)***	A penalty of Euros 50 to 500,000 per organisation, depending on the gravity of infringement, frequency, the relapse, the overshooting of enacted limits of emissions and the violation of environmental terms. ***L. 1650/1986 art. 30(par.1), as amended by art. 4 of Law 3010/2002*** Temporary cessation of activities or definitive cessation of operation of the installation where the enterprise fails or refuses to comply with recommended measures or if the taking of such measures is not feasible at the said installation. If due to the type, quantity of pollutants or the extent of environmental degradation there is a risk of death, serious bodily harm or ecological disaster, the Minister for the Environment may directly impose the temporary or permanent cessation of operation. Together with the Decision for the Cessation, a fine can be threatened, ranging from 29 to 2,900 Euro, for each day that the operation continues to operate, despite the Cessation Decision. ***L. 1650/1986 art. 30 (par.2)***	Causing infringement of the provisions of this decision by action or omission, the penal, civil and administrative sanctions provided for in articles 28, 29 and 30 of Law 1650/1986, as the latter article was amended by article 98 (par.12) of Law 1982/1990 (A 101) and then by article 4 of Law 3010/2002, are imposed. ***JMD 29457/2005, art.14 (1)*** The sanctions provided for in the previous paragraphs (1 and 2) are imposed regardless of the sanctions provided for issues that this decision affects in other provisions of the applicable legislation. ***JMD 29457/2005, art.14 (3)*** See in the introduction	See in the introduction

Obligation to comply with the conditions set in the permit or mandatory ELV's	As above	As above	As above	As above

Table 2.4 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Greece*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	1. Any natural or legal person who performs or co-incineration or disposal referred to in Articles 8 and 9 of this decision, in breach of the provisions of this decision the penalties provided for in Articles 28, 29, and 30 of Law 1650 / 1986, as amended Article 30 applies. 2. These sanctions are imposed irrespective of imposing other penalties provided for under other more specific provisions of existing legislation. ***JMD 22912/2005, art.15***	A penalty of Euros 50 to 500,000 per organisation, depending on the gravity of infringement, frequency, the relapse, the overshooting of enacted limits of emissions and the violation of environmental terms ***L. 1650/1986 art. 30(par.1), as amended by art. 4 of Law 3010/2002*** Temporary cessation of activities or definitive cessation of operation of the installation where the enterprise fails or refuses to comply with recommended measures or if the taking of such measures is not feasible at the said installation. If due to the type, quantity of pollutants or the extent of environmental degradation there is a risk of death, serious bodily harm or ecological disaster, the Minister for the Environment may directly impose the temporary or permanent cessation of operation. Together with the Decision for the Cessation, a fine can be threatened, ranging from Euros 29 to 2,900, for each day that the operation continues to operate, despite the Cessation Decision. ***L. 1650/1986 art. 30 (par.2)***	1. Any natural or legal person who performs or co-incineration or disposal referred to in Articles 8 and 9 of this decision, in breach of the provisions of this decision the penalties provided for in Articles 28, 29, and 30 of Law 1650 / 1986, as amended Article 30 applies. 2. These sanctions are imposed irrespective of imposing other penalties provided for under other more specific provisions of existing legislation. ***JMD 22912/2005, art.15*** See in the introduction	See in the introduction
Obligation to supply information for application for permits	As above	As above	As above	As above
Obligation to notify the competent authority of any changes in the	As above	As above	As above	As above

operation of an installation				
Obligation to comply with the conditions set in the permits or mandatory ELVs	As above	As above	As above	As above

Annex XII-Hungary

HUNGARY

1. Overview of penalties related to legislation on industrial installations

In Hungary, legal obligations in respect of the four Directives on industrial installations are transposed by the following specific acts and decrees relating to each Directive:

IPPC Directive: Government Decree No. 314/2005 (XII.25.) on Environmental Impact Studies and Integrated Environment Use Permits.

VOC Directive: Ministerial Decree (KöM) No. 10/2001 (IV.19.) on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, Government Decree No. 21/2001 (II.14) on Air Protection.

LCP Directive: Ministerial Decree (KvVm) No. 10/ 2003 (VII.11) on the limitation of emissions of certain pollutants into the air from large combustion plants, with a rated input equal to or greater than 50 MW; Government Decree No. 21/2001(II.14.) on Air Protection

WI Directive: Ministerial Decree (KöM) No. 3/ 2002 (II. 23) on the technical and operational conditions of waste incineration and on emission limit values relating to waste incineration, Ministerial Decree (KöM) No. 4/2001 (II. 23.) on waste oil management.

The Hungarian legal system provides several different mechanisms for liability in the event of non-compliance with environmental requirements. According to Article 101(1) of the Environmental Protection Act, *'whoever endangers, pollutes or harms the environment with his activity or omission, or performs his activity breaching environmental requirements shall bear the criminal, civil,*[107] *administrative or quasi-criminal responsibility defined by this Act or by other laws'.*

Administrative liability[108] applies when the activity of an installation lacks the consent of the competent authority[109] or is performed in such a way, which breaches environmental legislation or the decision of the competent authority. If the operator fails to comply with the environmental requirements, the competent authorities can impose administrative sanctions, including a fine and/or requiring the operator to perform or abstain from certain activity. Levels of fines often vary according to the level, weight and recurrence of the environmental pollution and environmental damage caused.[110] Administrative sanctions can be imposed both on legal and natural persons.[111]

The main administrative authorities at country level are the Ministry of Rural Development[112] and the National Inspectorate for Environment, Nature and Water.[113] However, at first instance, environment-related matters are managed by the regional environment, nature and water inspectorates and the national park directorates.[114]

Quasi-criminal liability constitutes a special type of liability, which has characteristics of both

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[107] Civil liability is not subject to the current study.
[108] Resource used: Measures other than criminal ones in cases where environmental Community Law has not been respected in a few Candidate countries http://ec.europa.eu/environment/legal/crime/studies_en.htm
[109] Legal Act LIII. of 1995 (the Environmental Protection Act) 106. § on environmental fines
[110] Article 106 (1) of the Environmental Act
[111] As an example Article 18 (1) of the Government Decree No. 21/2001 (II.14) on Air Protection states that air protection fine can be imposed both on natural persons, legal persons and other unincorporated organizations.
[112] Before Ministry of Environmental Protection and Water, http://www.vm.gov.hu/main.php?folderID=945
[113] The National Main Inspectorate of Environment and Water is mainly a second instance authority. http://www.orszagoszoldhatosag.gov.hu/index.php?akt_menu=78&bemut=3
[114] Resources used: http://www.iclg.co.uk/khadmin/Publications/pdf/3609.pdf

administrative and criminal liability. Petty offences[115] are considered less harmful to society than criminal offences, therefore quasi-criminal procedures are more simplified than criminal law procedures. The first instance procedures are handled by administrative authorities. However, decisions of first instance authorities can be appealed before superior administrative bodies and regular courts (criminal chambers). The typical first instance authorities are the notaries, the police, or other competent authorities such as authorities of consumer protection, or the administrative authority responsible for nature protection.[116] The sanctions imposed for quasi-criminal offences are similar to those for criminal offences, therefore sanctions could for example include imprisonment or fines.[117] Coercive measures, such as custody or detention may also be imposed.With regard to the industrial installations, the so-called 'environmental protection petty offence' is the most relevant.[118] According to Article 148 of the Petty Offence Act, a fine up to Euros 547 (HUF 150,000) can be imposed in cases of operating without an environmental permit or non-complying with its conditions. According to the Hungarian legal system, only natural persons can be liable for petty offences. In case a legal person breaches its legal obligations, the person whose act or omission caused the breach will be liable.

In case of the most serious breaches of environmental obligations, criminal liability may arise. Criminal liability is regulated in the Hungarian Criminal Code (Act IV. of 1978. - Article 280- 281/A). In principle, environmental crimes are felonies.[119] Environmental crimes can be committed by both active behaviours and omissions. The result of the crime (material crime) usually constitutes harm or danger to the environment. Typical sanctions pursuant to Hungarian criminal law can include principle and supplementary punishments, such as imprisonment or a fine.[120] The Hungarian Criminal Code does not cover offences which relate specifically to infringements of the four directives, but it does include certain general offences which are of relevance, such as damage to the environment and violation of waste management regulations.

According to Article 280 (1) of the Criminal Code,[121] a person responsible for any pollution of the earth, the air, the water, the biota (flora and fauna) and their constituents, resulting in (i) their endangerment (ii) damage to such an extent that its natural or previous state can only be restored by intervention, or (iii) damage to such an extent that its natural or previous state cannot be restored at all, is guilty of a felony and can be punishable for imprisonment up to 8 years. Article 281/A of the Criminal Code (violation of waste management regulations) states that a person who carries out waste management activities without an environmental permit, fails to comply with its provisions, or carries out other unlawful activities is guilty of a felony and can be punished by imprisonment for up to 5 years.

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[115] 'Petty Offences Act LXIX of 1999, Article 1 (1), *'petty offences are those illegal actions realized in an activity or omission that are classified as petty offences by an Act of Parliament, by a government decree or by a municipality decree, and whose perpetrators are threatened with sanctions defined below'*.

[116] Resource used: Article 32-35 of the Petty Offences Act

[117]13. § (1) Penalties applicable for petty offences: a.) imprisonment, b.) fine. Measures applicable for petty offences: a.) prohibition from driving, b)confiscation of goods, c.) notification, d.) expulsion

[118] List of petty offences which could be relevant with regard to IPPC installations:

- Environmental protection petty offence (Act LXIX of 1999, Article 148);
- Nature protection petty offence (Act LXIX of 1999, Article 147);
- Water pollution petty offence (Government Decree 218/1999 (XII. 28.), Article 126);
- Petty offence of breaching water law requirements (Government Decree 218/1999 (XII. 28.), Article 125); and
- Petty offence of breaching flood protection and/or inland flood protection requirements (Government Decree 218/1999 (XII.28.), Article 127).

[119]Criminal Code (Act IV. Of 1978) Article 11 (2) A felony is an act of crime perpetrated intentionally, for which the law orders the infliction of a punishment graver than imprisonment of two years. Any other act of crime is misdemeanor.

[120]Criminal Code Article 38: (1) Principal punishments are: 1. imprisonment, 2. labour in the public interest, 3. Fine 4. Prohibition from profession 5. Prohibition from driving vehicles and 6. Expulsion.
Supplementary punishments are: 1. prohibition from public affairs and 2. Banishment.

[121] Article 280 of the Criminal Code (Act IV of 1978): Harming the environment

The criminal liability of legal persons was introduced to the Hungarian legal system in 2001, by Act CIV of 2001.[122] Criminal measures against legal persons can only be imposed if the crime was intentional and the intention of the perpetrator was to get unlawful gains for the benefit of the legal person or his activity resulted in such gains. As a second precondition, criminal sanctions can only be imposed if the perpetrator was in a certain relationship with the legal person,[123] or was in charge of certain tasks.[124] Act CIV of 2001 foresees the following criminal measures against legal persons: dissolving the legal person, restricting/limiting the activities of the legal person, and/or imposing a fine.[125]

In practice, most of the environmental penalties in respect of industrial installations are administrative in nature. Administrative penalties can be imposed alongside quasi-criminal and criminal sanctions.[126] However, quasi-criminal and criminal penalties cannot be applied in conjunction.[127]

As a general rule, a polluter may also be held liable pursuant to Article 101(2) of the Environment Act for the costs of prevention and remediation of the polluting activity, In addition, the operator is required to *inter alia* mitigate the damage, inform the authorities of the pollution, refrain from engaging in any activity posing an imminent threat or causing damage to the environment, cease such an activity where applicable, accept the responsibility for the environmental damaged caused and cover the costs of prevention and rehabilitation.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Hungary

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant

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[122] Legal Act CIV of 2001 on Criminal Measures Applicable against Legal Persons

[123] In line with Article 2(1)(a) of Act CIV of 2004, this category of covers the executive officer, member or employee of the legal person entrusted with the right of acting on behalf of the legal person, its official, director or member of its supervisory board and their representatives, within the activity of the legal person. Pursuant to Article 2(2) of Act CIV of 2004, criminal measures can also be imposed on legal persons if the criminal act resulted in unlawful gains for the legal person and the legal person's executive officer, member or employee entrusted to act on behalf of the legal person, its official, directors, or member of its supervisory board was aware of the criminal act.

[124] In line with Article 2(1)(b) of Act CIV of 2004 this category covers the member or employee of the legal person, if the crime was committed within the activity of the legal person and could have been prevented if the executive officer, the director, or the supervisory board had properly fulfilled his control and supervisory obligations.

[125] Article 2 (1) and Article 3 of Act No. CIV. of 2001

[126] Environmental Protection Act, Article 107, *'the imposition of an environmental fine does not free anyone from criminal, quasi-criminal or civil liability, or from being obliged to limit, suspend or halt an activity, from realizing protective measures or from restoring the natural or previous state of environment'.*

[127] Petty Offences Act, Article 1 (2) *'[…] no petty offence can be established if the action constitutes a crime'.*

Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Hungary
IPPC Directive	
Catch-all	-
4	X
5	X
6	X
12 (1)	-
12 (2)	-
14 (a)	X
14 (b)	X
14 (c)	-
VOC Directive	
Catch-all	-
3(2)	-
4	-
5 (2)(a)	X
5 (2)(b)	X
5 (4)	-
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	-
5 (10)	-
8 (1)	X[128]
9 (1)	-
10 (a)	-
LCP Directive	
Catch-all	-
4 (1)	-
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	-
10	-
13	X[129]
WI Directive	
Catch-all	-
4 (1)	X[130]
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	-
8 (4)	X
8 (5)	-
8 (7)	-
9	X
10 (1)	X

[128] Government Decree No. 21/2001 on Air Protection, Article 16 (1) and (5).
[129] Government Decree No. 21/2001 on Air Protection, Article 16 (1).
[130] Government Decree No. 314/2005 on Environmental Impact Studies and Integrated Environment Use Permits, Article 1 (2) and (5), Article 2(3) and Article 27 (3).

10 (2)	X
11	X
12 (2)	-
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Hungary. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.46 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Hungary*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating without integrated environmental permit, or without an environmental permit. ***26 § (1) and (2) of Government Decree 314/2005 (XII.25)***[131]	Depending on the degree of influence on the environment, the competent authority may, a) limit; b) suspend; or c) prohibit the continuation of the illegal conduct; ***26 § (1) of Government Decree, 314/2005 (XII.25)*** In addition, the competent authority shall, having regard to the danger the illegal conduct may have on the environment, impose a fine of Euros 182 to 365 (HUF 50 000 to 100 000) / day for the period when the installation is operated without a permit. ***26 § (3) Government Decree 314/2005 (XII.25)***	**Quasi-criminal offence:** See introduction.	**Quasi-criminal penalty:** See introduction.
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation of the operator to comply with the permit conditions while	The competent authority obliges the operator to:	**Quasi-criminal offence:** See introduction. **Criminal offence:** See introduction.	**Quasi-criminal penalty**: See introduction. **Criminal penalties:** See introduction

[131] Article 26 (2): 'Operating without an integrated environmental permit in case of activities specified in Article 1 (3) (a)' Article 1 (3) refers to those activities which are listed in Annex I of the Government Decree.

	carrying out activities. ***26 § (4) Government Decree, 314/2005 (XII.25)***	a.) pay a fine of Euros 730-1,826 (HUF 200 000 to 500 000) b.) comply with the conditions set in the permit, c.) within a six months period prepare a programme of measures or carry out an environmental review. ***Article 26 (4), Government Decree 314/2005***		
	Endangering the environment or causing environmental pollution or non-compliance with administrative decision. ***26 § (5), Government Decree, 314/2005 (XII.25)***	Depending on the degree of influence on the environment, the competent authority may,:: a) limit; b) suspend; or c) prohibit the continuation of the illegal conduct. ***26 § (1) Government Decree, 314/2005 (XII.25)***		
	<u>Infringement or non-compliance with the following requirement:</u> Obligation of the operator to comply with administrative decision. ***26 § (5), 314/2005 (XII.25) Government Decree***	Depending on the degree of influence on the environment, the competent authority may,:: a) limit; b) suspend; or c) prohibit the continuation of the illegal conduct. ***26 § (1) Government Decree, 314/2005 (XII.25)*** 'Or' Withdrawal of the environmental or integrated environmental permit. ***26 § (5)). Government Decree (314/2005 (XII.25)*** 'Or' The competent authority obliges the operator to: a.) pay a fine from Euros 730 - 1 8, 26		

		(HUF 200 000 to 500 000), b.) comply with the conditions set in the permit, c.) within a six months period prepare a programme of measures or carry out an environmental review. ***Article 26 (4). Government Decree 314/2005 (XII.25)***		

*ELVs: Emission Limit Values

Table 47.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Hungary*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A	N/A	**Quasi-criminal offence:** See introduction.	**Quasi-criminal penalty:** See introduction.
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Exceeding emission limit values. (ELVs) ***Article 9, Ministerial Decree (KöM) No. 10/2001(IV. 19);*** ***Article 18, Government Decree, No. 21/2001 (II.14)*** [132] <u>Infringement or non-compliance with the following requirement:</u> Obligation of the operator to fulfil the relevant air protection requirements. ***Article 18, Government Decree No.***	*According to Article 9 of 10/2001 Ministerial Decree, in case of exceeding the emission limit values, the competent authorities may impose fines, in line with the relevant provisions of 21/2001 Government Decree:* The amount of the fine ('air pollution fine') depends on various criteria such as the quantity of exceeding emission, type of air pollutants. ***Annex 6-8 of Government Decree 21/2001 (II.14) and Annex 6 of Ministerial Decree (KöM) No. 10/2001 (IV.19.)*** *According to Article 9 of 10/2001 Ministerial Decree, in case of exceeding the emission limit values, the competent*	**Quasi-criminal offence**: See introduction. **Criminal offence:** See introduction	**Quasi-criminal penalty:** See introduction. **Criminal penalties:** See introduction

[132] The 10/2001 (IV.19) Ministerial Decree refers to the 21/2001 (II. 14) Governmental Decree by stating that where not covered by the Decree, the relevant provisions of the Governmental Decree shall apply. *(Article 1 (3)).* According to Article 9 (1), in case of exceeding the VOC emission limit values, air pollution fine shall be imposed. Rules for imposing these sanctions shall be in line with the relevant provisions of the 21/2001 (II. 14) Governmental Decree.

	21/2001 (II.14)	*authorities may impose fines, in line with the relevant provisions of 21/2001 Government Decree:* -The amount of the fine ('air protection fine') depends on various criteria such as the quantity of exceeding emission, air pollutants. ***Annex 6-8 of Government Decree No. 21/2001 (II.14)***		

Table 2.48 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Hungary*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	**Same as for IPPC ie** Operating an installation without an integrated environmental permit. ***26 § (1) and (2) of Government Decree, 314/2005 (XII.25)***	**Same as for IPPC ie** Operating an installation without an integrated environmental permit. ***26 § (1) and (2) of Government Decree, 314/2005 (XII.25)***	**Quasi-criminal offence**: See introduction.	**Quasi-criminal penalty**: See introduction.
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	**Same as for IPPC ie** Operating an installation without an integrated environmental permit. ***26 § (1) and (2) of Government Decree, 314/2005 (XII.25)*** **NB The following offence is not covered by IPPC:** Exceeding emission limit values (ELVs). ***Article 18 Government Decree 21/2001 (II.14) and , article 12[133] KvVM Ministerial Decree, 10/2003 (VII. 11)***	**Same as for IPPC: ie** Operating an installation without an integrated environmental permit.[134] ***26 § (1) and (2) of Government Decree, 314/2005 (XII.25)*** **NB Not covered by IPPC:** The amount of the fine ('air pollution fine') depends on various criteria such: - In case of exceeding annual emission limit values: the amount of fine depend on the quantity of exceeding emission Euro 0.21 (HUF 60/kg/ SO2 and nitrogen-oxide emission) - Exceeding technological limit values:	**Quasi-criminal offence:** See introduction. **Criminal offence:** See introduction	**Quasi-criminal penalty:** See introduction. **Criminal penalties:** See introduction

[133] Article 12 of the 10/2003 (VII. 11) KvVM Ministerial Decree includes provisions on the special rules applied for imposing fines for air pollution. General rules applied for air pollution fines are regulated by article 18 of (21/2001 (II.14) Governmental Decree

[134] According to Article 29 of the Government Decree 'Existing installations shall comply with the provisions of the integrated environmental permit by 31 October 2007 (if no other legal provision applies).' The first indent of Article 26 lays down sanctions in case installations operate without integrated environmental permit after the deadline indicated in the Regulation (i.e. Article 29) or in legally binding decisions of the competent authorities. Through these provisions the Hungarian legislation sanctions those existing operations which do not obtain permits within the deadlines.

	Infringement or non-compliance with the following requirement: Obligation of the operator to fulfil the relevant air protection requirements (Breaches of air protection requirements). ***Article 18 Government Decree 21/2001 (II.14) and , article 12 KvVM Ministerial Decree, 10/2003 (VII. 11)***	depends on the air pollutant. If there are more than one air pollutants, the authority calculates the fine for each of the air pollutants. and imposes the largest fine. ***Article 12 Ministerial Decree (KvVM) 10/2003 (VII. 11)*** The amount of the fine ('air protection fine') depends on the criteria described above. ***Annex 6-8 of Government Decree 21/2001 (II.14)***		

Table 2.49 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Hungary*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	**Quasi-criminal offence:** See introduction **Criminal offence:** See above under general introduction	**Quasi-criminal penalty:** See introduction **Criminal penalties:** See introduction
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to fulfil the requirements prescribed in laws in connection with waste management in decisions of the authorities and other infringement of the relevant rules. ***Article 1 (3) a.) Government Decree 271/ 2001 (XII. 21)*** Infringement or non-compliance with the following requirement: Obligation to fulfil waste-treatment requirements, technical rules and obligations established by separate laws relating to certain types of waste or abandoned cars. ***Article 1 (3) c.), Government Decree, 271/ 2001 (XII. 21)***	The amount of fine depends on the administrative offence: • Euros 32 (HUF 9,000). ***Article 1 (3) a.) Government Decree, 271/ 2001 (XII. 21)*** • Euros 54 (HUF 15,000). ***Article 1 (3) c.) Government Decree,*** *271/ 2001 (XII. 21)*	Quasi-criminal offence: See introduction. **Criminal offence:** See introduction	Quasi-criminal penalty: See introduction. **Criminal penalties:** See introduction

[135] In line with provisions of Legal Act LIII of 1995 on Environment Protection.

	Unlawful waste treatment activities. ***Article 1 (3) d.) Government Decree, 271/ 2001 (XII. 21)*** Endangerment of the environment.[135] ***Article 1 (3) ea.) Government Decree, 271/ 2001 (XII. 21)*** Harming the environment. ***Article 1 (3) eb.) Government Decree, 271/ 2001 (XII. 21)*** Any other infringement not entailing with endangering or harming the environment. ***Article 1 (4) Government Decree, 271/ 2001 (XII. 21)***	• Euros 64 (HUF 18,000). ***Article 1 (3) d.) Government Decree, 271/ 2001 (XII. 21)*** • Euros 87 (HUF 24,000). *Article 1 (3) ea.) Government Decree 271/ 2001 (XII. 21)* • Euros 172 (HUF 48,000). ***Article 1 (3) eb.) Government Decree 271/ 2001 (XII. 21)*** • Euros 21 (HUF 6,000). ***Article 1 (4) Government Decree, 271/ 2001 (XII. 21)***		

Annex XIII-Ireland

IRELAND

1. Overview of penalties related to legislation on industrial installations

In Ireland, the legal obligations and penalties relating to industrial installations are covered primarily by the Environmental Protection Agency Act 1992 as amended by the Protection of the Environment Act 2003, as well as by the following specific acts relating to each Directive:

IPPC Directive: The Environmental Protection Agency (Licensing) Regulations 1994 (S.I. No. 85/1994), as amended by the Environmental Protection Agency (Licensing) (Amendment) Regulations 2004 (S.I. No. 394/2004), and the Waste Management (Licensing) Regulations 1997 (S.I. No. 133/1997) as amended by the Waste Management (Licensing) Regulations 2004 (S.I. No. 395/2004);

VOC Solvents Directive: Emissions of Volatile Organic Compounds from Organic Solvents Regulations 2002 (S.I. No. 543 of 2002); Limitation of Emissions of Volatile Organic Compounds due to the use of Organic Solvents in Certain Paints; The Air Pollution Act 1987;

Waste Incineration Directive: The Environmental Protection Agency (Licensing) Regulations 1994 (S.I. No. 85/1994), as amended by the Environmental Protection Agency (Licensing) (Amendment) Regulations 2004, and the Waste Management (Licensing) Regulations 1997 (S.I. No. 133/1997), as amended by the Waste Management (Licensing) Regulations 2004 (S.I. No. 395/2004), the Waste Management Act 1996, the Waste Management (Amendment) Act 2001, the European Communities (Incineration of Waste) Regulations 2003 (S.I. No. 275 of 2003);

LCP Directive: The Air Pollution Act 1987, the Large Combustion Plants Regulations 2003 (S.I. No. 644 of 2003), as amended by the Large Combustion Plants Regulations 2010 (S.I.No. 371/2010).

Administrative sanctions as defined in the continental law system do not exist in Ireland.

Persons who infringe their legal obligations can be convicted on summary conviction (petty offences) or on conviction on indictment (serious offences) depending on the type and level of infringement. A person found guilty is liable on summary conviction to a fine not exceeding Euros 3000 and/or to imprisonment for any term not exceeding 12 months. A person found guilty is liable on indictment to a fine not exceeding Euros 15,000 and/or to imprisonment for a term not exceeding ten years. Continued contravention on conviction carries extended penalties every day thereafter of up to Euros 1000 on summary conviction and up to Euros 130,000 on conviction on indictment.[136] "Person" includes natural or legal persons.

In Ireland, the Environment Protection Agency (EPA) is the primary body responsible for issuing permits and enforcing legislation relating to industrial installations. In many cases, prosecution will be the ultimate sanction used by the EPA. However, alternatives and precursors to prosecution include warning letters (often used as a first step before proceedings), statutory notices requiring specific actions to be taken (for example to suspend/revoke a licence) and court orders (which may be used to cease the cause of pollution). The EPA also has the statutory power to periodically review permits. The approach taken will usually depend on the nature and severity of the event causing the pollution.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Ireland

[136] The Environmental Protection Agency Act [No. 7] 1992 as amended by the Protection of the Environment Act [No. 27] 2003.

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Ireland
IPPC Directive	
Catch-all	C
4	X
5	X
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X

6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Ireland. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.50 *Directive 2008/1/EC (IPCC Directive): types of offences and related administrative and criminal penalties in Ireland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	Carrying out an activity (specified in the First Schedule of the Act) without a licence or revised licence as required pursuant to the ***Environmental Protection Agency Act 1992, s82(2) (as amended by the Protection of the Environment Act 2003, s 15)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)***	(1)(a) On summary conviction, to a fine not exceeding Euros 3000, or to imprisonment for any term not exceeding twelve months or, at the discretion of the court, to both such fine and such imprisonment, or (b) On conviction on indictment, to a fine not exceeding Euros 15,000,000 or to imprisonment for a term not exceeding ten years or, at the discretion of the court, to both such fine and such imprisonment. (2) In imposing any penalty under *subsection (1)* the court shall, in particular, have regard to the risk or extent of damage to the environment and any remediation required arising from the act or omission constituting the offence. (3) Where a person, after conviction of an offence under the Act, continues to contravene the provision, he shall be guilty of an offence on every day on which the contravention continues and for each such offence he shall be liable to a fine, on summary conviction, not exceeding Euros 1000 or, on conviction on indictment, not exceeding Euros 130,000. ***Environmental Protection Agency Act, 1992 s9 (as amended by Protection of the Environment Act 2003 s 10)***

Obligation to supply information for application for permits	N/A	N/A	Failure to provide the information specified at Art 10 of The Environmental Protection Agency (Licensing) Regulations 1994 (as amended) Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)***	As above
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	Failure to give notice in writing to the Agency of any proposal to effect any alteration to, or reconstruction in respect of, the activity if such alteration or reconstruction would, or is likely to, change or increase emissions from the activity or cause new emissions therefrom, pursuant to ***Environmental Protection Agency Act 1992, s98(1) (as amended by Protection of the Environment Act 2003, s 15)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)***	As above
Obligation to comply with the conditions set in the permit or mandatory ELVs			Failure to comply with any condition attached to a licence or revised licence pursuant to the ***Environmental Protection Agency Act, 1992 s86 (6) (as amended)*** Any person who contravenes any provision of the Act or of any regulation	As above

			made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)***	

*ELVs: Emission Limit Values

Table 51.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Ireland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A	N/A	Contravention of ***s5/s6 of the Emissions of Volatile Organic Compounds from Organic Solvents Regulations 2002,*** namely commencing to operate, or continuing to operate, without a certificate of compliance (new installation) (s5); or failure to register (s6) thereby an offence pursuant to the ***Environmental Protection Agency Act 1992 and the Air Pollution Act 1987*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any notice served under the Act shall be guilty of an offence. ***Air Pollution Act 1987, 11(1)***	(1)(a) On summary conviction, to a fine not exceeding Euros 3000, or to imprisonment for any term not exceeding twelve months or, at the discretion of the court, to both such fine and such imprisonment, or (*b*) On conviction on indictment, to a fine not exceeding Euros 15,000,000 or to imprisonment for a term not exceeding ten years or, at the discretion of the court, to both such fine and such imprisonment. (2) In imposing any penalty under *subsection (1)* the court shall, in particular, have regard to the risk or extent of damage to the environment and any remediation required arising from the act or omission constituting the offence. (3) Where a person, after conviction of an offence under the Act, continues to contravene the provision, he shall be guilty of an offence on every day on which the contravention continues and for each such offence he shall be liable to a fine, on summary conviction, not exceeding Euros 1000 or, on conviction on indictment, not exceeding Euros 130,000. ***Environmental Protection Agency Act, 1992 s9 (as amended by Protection of the Environment Act 2003 s 10)***

				And A person guilty of an offence under the Act shall be liable: (*a*) on summary conviction, to a fine not exceeding £1,000 (Euros 1,194) (together with, in the case of a continuing offence, a fine not exceeding £100 (Euros 119) for every day on which the offence is continued and not exceeding in total an amount which, when added to any other fine under this paragraph in relation to the offence concerned, equals £1,000 (Euros 1,194), or to imprisonment for any term not exceeding six months or, at the discretion of the court, to both such fine and such imprisonment, (*b*) on conviction on indictment, to a fine not exceeding £10,000 (Euros 11,939) (together with, in the case of a continuing offence, a fine not exceeding £1,000 (Euros 1,194) for every day on which the offence is continued), or to imprisonment for any term not exceeding two years or, at the discretion of the court, to both such fine and such imprisonment[137]. (2) Section 13 of the Criminal Procedure Act, 1967 shall apply in relation to an offence to which *subsection (1)* relates as if, in lieu of the penalties provided for in subsection (3) of the said section 13,

[137] Note that the Emissions of Volatile Organic Compounds from Organic Solvents Regulations 2002 are made pursuant both to the Air Pollution Act 1987 and the Environmental Protection Agency Act 1992.

				there were specified therein the penalties provided for in *subsection (1)(a)*, and the reference in subsection (2) (*a*) of the said section 13 to the penalties provided for in the said subsection (3) shall be construed and have effect accordingly. ***Air Pollution Act 1987 12(1)***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	N/A	N/A	Contravention of requirements under the ***Emissions of Volatile Organic Compounds from Organic Solvents Regulations 2002,*** (compliance requirements) thereby an offence pursuant to the ***Environmental Protection Agency Act 1992 and the Air Pollution Act 1987:*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any notice served under the Act shall be guilty of an offence. ***Air Pollution Act 1987, 11(1)***	As above

Table 2.52 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Ireland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	Failure to give notice in writing to the Agency of any proposal to effect any alteration to, or reconstruction in respect of, the activity if such alteration or reconstruction would, or is likely to, change or increase emissions from the activity or cause new emissions therefrom, pursuant to ***Environmental Protection Agency Act 1992, s98(1) (as amended by Protection of the Environment Act 2003, s 15)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any notice served under the Act shall be guilty of an offence. ***Air Pollution Act 1987, 11(1)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)***	(a) On summary conviction, to a fine not exceeding Euros 3,000, or to imprisonment for any term not exceeding twelve months or, at the discretion of the court, to both such fine and such imprisonment, or (*b*) On conviction on indictment, to a fine not exceeding Euros 15,000,000 or to imprisonment for a term not exceeding ten years or, at the discretion of the court, to both such fine and such imprisonment. (2) In imposing any penalty under *subsection (1)* the court shall, in particular, have regard to the risk or extent of damage to the environment and any remediation required arising from the act or omission constituting the offence. (3) Where a person, after conviction of an offence under the Act, continues to contravene the provision, he shall be guilty of an offence on every day on which the contravention continues and for each such offence he shall be liable to a fine, on summary conviction, not

				exceeding Euros 1,000 or, on conviction on indictment, not exceeding Euros 130,000. ***Environmental Protection Agency Act, 1992 s9 (as amended by Protection of the Environment Act 2003 s 10)*** And (1) A person guilty of an offence under the Act shall be liable (*a*) on summary conviction, to a fine not exceeding £1,000 (Euros 1,194) (together with, in the case of a continuing offence, a fine not exceeding £100 (Euros 119) for every day on which the offence is continued and not exceeding in total an amount which, when added to any other fine under this paragraph in relation to the offence concerned, equals £1,000 (Euros 1,194)), or to imprisonment for any term not exceeding six months or, at the discretion of the court, to both such fine and such imprisonment, (*b*) on conviction on indictment, to a fine not exceeding £10,000 (Euros 11,938) (together with, in the case of a continuing offence, a fine not exceeding £1,000 (Euros 1,194) for every day on which the offence is continued), or to imprisonment for any term not exceeding two years or, at the discretion of the court, to both such fine and such imprisonment. (2) ***Section 13 of the Criminal Procedure Act, 1967*** , shall apply in relation to an offence to which *subsection (1)* relates as if, in lieu of the

				penalties provided for in subsection (3) of the said section 13, there were specified therein the penalties provided for in *subsection (1) (a)*, and the reference in subsection (2) (*a*) of the said section 13 to the penalties provided for in the said subsection (3) shall be construed and have effect accordingly. ***Air Pollution Act 1987, 12(1)***
Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A	N/A	Failure to comply with any condition attached to a licence or revised licence pursuant to the ***Environmental Protection Agency Act, 1992 s82(6) (as amended)*** Any person who contravenes any provision of the Act or of any regulation made under the Act or of any order made under the Act or of any notice served under the Act shall be guilty of an offence. ***Environmental Protection Agency Act, 1992 s 8(1)***	As above

Table 2.53 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Ireland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	Failure to dispose or undertake the recovery of waste at a facility in accordance with a licence, pursuant to ***Waste Management Act, 1996, s 39(9) (as amended by Protection of the Environment Act 2003, s34)***	(1) A person guilty of an offence under the Act (other than an offence referred to in *subsection (2)*) shall be liable— (*a*) on summary conviction, to a fine not exceeding Euros 3,000 or to imprisonment for a term not exceeding 12 months, or to both such fine and such imprisonment, or (*b*) on conviction on indictment, to a fine not exceeding Euros 15,000,000 or to imprisonment for a term not exceeding 10 years, or to both such fine and such imprisonment. (2) A person guilty of an offence under section 16 (5), 32 (6) (where the offence consists of a contravention of regulations under subsection (4) of that section), 33 (8), 38 (7) or 40 (13) shall be liable on summary conviction to a fine not exceeding Euros 3,000 or to imprisonment for a term not exceeding 12 months, or to both such fine and such imprisonment. (3) If the contravention in respect of which a person is convicted of an offence under the Act is continued after the conviction, the person shall be guilty of a further offence on every day on which the contravention continues and for each such offence the person shall be liable, on summary conviction, to a fine not exceeding Euros 3,000 or (in the case

				of an offence to which subsection (1) applies) on conviction on indictment, to a fine not exceeding Euros 100,000. ***Waste Management Act, 1996, s 10 (as amended by the Protection of the Environment Act 2003, s22)***
Obligation to supply information for application for permits	N/A	N/A	Contravention of the requirement pursuant to Regulation 12 of the ***Waste Management (Licensing) Regulations 2004*** to provide the information specified (thereby contravening a provision of regulations under s39(6), ***s 39(9) Waste Management Act, 1996 (as amended by Protection of the Environment Act 2003, s34)***	As above
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	Failure of a waste licence holder to give notice in writing to the Agency of any proposal to effect a change in the nature, extent or function of an activity or facility to which that licence relates if the effecting of that change could have consequences for the environment. ***S40(6) Waste Management Act (as amended by s40 of the Protection of the Environment Act 2003)***	As above
Obligation to comply with the conditions set in the permits or mandatory ELVs	N/A	N/A	Failure to dispose of or undertake the recovery of waste at a facility save under and in accordance with a licence ***s 39(1) Waste Management Act, 1996 (as amended by Protection of the Environment Act 2003, s34)***	As above

Annex XIV-Italy

ITALY

1. Overview of penalties related to legislation on industrial installations

The Italian system of penalties appears to be rather complicated. In particular, relationships between various sanctions established by different acts and applicable to one offence are not clearly set, as briefly described below.

VOC and LCP Directives: The "Code of Environmental Law", i.e. the Legislative Decree 2006, no.152 (D.Lgs 152/2006)[138] Part V (Articles 267-298) transposes Directive 1999/13/EC and 2001/80/EC and sets the permit procedure and requirements for respectively VOC and LCP installations and lays down sanctions for the infringement of these obligations.

IPPC and WI Directives: IPPC and waste incineration facilities are regulated by two sectoral decrees, as follows:

- Legislative Decree of 18 February 2005, no. 59 (D.Lgs 59/2005) applies to IPPC installations.
- Legislative Decree 2005 no. 133 (D.Lgs 133/2005) transposes Directive 2000/76/EC.

Both decrees regulate the permit procedure for the relevant plants and sets corresponding sanctions.

All installations that fall under the scope of the IPPC Directive, irrespective whether they additionally fall under the scopes of Directive 1999/13/EC, 2001/80/EC or 2000/76/EC, are subject to the national IPPC authorisation procedure, in which the compliance with the requirements of all other legislation transposing these Directives are scrutinised. This so called "single permit" procedure allows the applicant to apply for one single permit and thus avoiding applying for different permits under different administrative procedures.

With regard to the scope of application of these different acts, in general, all the provisions/sanctions included in D.Lgs. 152/2006, D.Lgs. 59/2005 and D.Lgs. 133/2005 may be applicable, although each of the Decrees has partly a different scope. The legislation to be applied will depend on the alleged offence/fact. Pursuant to D.Lgs. 152/2006 (Art. 254), the *penalties included in specific existing legislation will remain applicable.* Therefore, D.Lgs. 152/2006 applies only if the Decree makes a specific reference to the application of 152/2006, otherwise the specific exiting legislation will apply.

However, the practical application of this rule is subject to uncertainties in relation to D.Lgs. 133/2005 (Art. 19), the specific legislation that establishes the sanctions for the infringements of the provisions on incineration and co-incineration of waste. In case of infringement to the requirements applicable to incineration installations, the sanctions provided for by Art. 19 will apply.

Certain incineration or co-incineration of waste plants fall within the scope of D.Lgs. 59/2005 on IPPC and will thus be required to obtain an IPPC permit. In this case, the prevailing view is that the IPPC legislation will take precedence. For instance, Art. 16.1 of D.Lgs. 59/2005 applies certain sanctions to the plants that were required to obtain an IPPC permit and failed to do so. If an incineration of waste plant operates without having obtained such a specific permit, then Art. 16.1 of D.Lgs. 59/2005 applies. The reasoning behind is that D.Lgs. 59/2005 is considered as a special legislation in relation to the D.Lgs. 152/2006, and even more specific compared to D.Lgs. 133/2005. Therefore, the sanctions set by D.Lgs. 59/2005 will apply in the case of an incineration plant that operates without having obtained an IPPC permit. As the sanctions provided for by D.Legs 59/2005 are less stringent than those set up by D.Lgs 133/2005, this leads to a paradox whereby sanctions for operating without a permit will be more severe for an incineration plant not covered by IPPC, than for one falling under the scope of IPPC.

[138] As amended by Legislative Decree 2008, no. 4

However, it seems that this approach is not always followed. The fact that an installation is required to obtain an IPPC permit does not in itself exclude the possibility of applying the sanctions of D.Lgs. 152/2006 or D.Lgs. 133/2005. Everything will depend on how the fact/omission is interpreted. So in practice, the prosecution could consider appropriate to apply a stricter sanction, although the defence could always argue that the fact is to be interpreted as included in the IPPC legislation and that therefore the sanctions of D.Lgs. 59/2005 should apply.

Offences pursuant to D.Lgs 152/2006, D.Lgs 59/2005 and D.Lgs 133/2005 are primarily criminal in nature, and are punishable with imprisonment, which may range from 2 months up to two years and fines up to Euros 50,000.

Recently, the Italian legislator has started to favour administrative sanctions for a range of environmental offences, when before criminal ones were preferred. One of the reasons is that administrative sanctions are seen as easier to enforce.[139] This is the case in Article 16 of D.Lgs 59/2005, which subjects to administrative sanctions the following offences:

- Failure to notify the competent authority and the city mayor the starting date for implementation of the permit conditions;
- Failure to notify the competent authority emission monitoring data;
- Failure to review the permit application as requested before the deadline specified by the competent authority.

Only the failure to notify emission monitoring data to the competent authority is relevant in relation to the Directives covered.

Another case of administrative sanctions is relevant to this overview and relates to VOC installations. D.Legs 133/2005 establishes an administrative sanction, which applies to all offences not covered by the particular sanctions relating to specific offences set by the Decree (See Table on VOC Directive in Section 2).

However, as a rule, sanctions for infringements to legislation transposing the four directives covered by this overview are generally of criminal nature and do not reflect this recent trend to favour administrative sanctions.

In addition to the sanctions described in the next section, Article 257 D.Lgs 152/2006 contains a criminal offence, which covers any behaviour or failure to act that is not in compliance with environmental legislation. If somebody causes the pollution of soil, subsoil, surface water or groundwater and thereby exceeds the risk concentration thresholds, the offender is subject to punishment of arrests from 6 months to 1 year or fines from Euros 2,600 to 26,000, if the offender does not remediate the site in accordance with this Decree. If hazardous substances are involved in the pollution, the courts are authorised to impose arrests from 1 year to 2 years and fines from Euros 5,200 to 52,000.

Under Italian law, there is a distinction between sanctions for natural and legal persons. Corporate entities cannot generally be held liable for criminal offences. Instead criminal sanctions are applied to those individuals who have made the relevant decisions on behalf of the corporate entity. Any reference to legal person has to be understood as a reference to the "person" representing it/acting on its behalf. With regard to criminal sanctions, only natural persons may be held liable of criminal offences. The criminal liability is so called "personal".

In addition to the criminal and administrative penalties, the Italian legislation entitles the competent authorities to enforce the national legislation by virtue of a variety of different administrative enforcement measures. Depending on the degree of seriousness of the offence, the competent authority

[139] *Environmental Penalties in Italy, Paola Brambilla*, Elni Review No1/2009, p.2

has the discretionary power to warn (give a notice) the perpetrator and give a period of time within which the irregularities shall be corrected, to warn and then to suspend the permitted activity for a limited time period if there is a danger for the environment and finally to warn and then revoke the integrated environmental permit and to close the plant in case of failure to comply with the requirements imposed by the notice and in case of repeated violations that lead to danger and harm to the environment.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Italy

"The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision".

Article	Italy
IPPC Directive	
Catch-all	
4	X
5	X
6	-
12 (1)	-
12 (2)	-
14 (a)	X
14 (b)	X
14 (c)	-
VOC Directive	
Catch-all	
3(2)	X
4(4)	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	-
5 (5)	-
5 (6)	-
5 (8)	-
5 (9)	-
5 (10)	X
8 (1)	X
9 (1)	-
10 (a)	X
LCP Directive	
Catch-all	
4 (1)	
4 (2)	

4 (4)	
5	X[140]
7 (1)	X
9	
10	
13	X
WI Directive	
Catch-all	C[141]
4 (1)	X
4 (2)	X and C[142]
4 (8)	
5 (1)	X
5 (2), (3) & (4)	
6	X
7	X
8 (1)	X
8 (4)	
8 (5)	X
8 (7)	X
9	
10 (1)	
10 (2)	
11	X
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Italy. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste

[140] Only Article 5(1) is applicable in Italy
[141] This catch-all provision applies when no specific sanction is established for non-respect of a particular obligation set up by the Decree.
[142] Art. 19.12 of Dlg 133/05 expressly covers the breach of Art. 4.2 of the national legislation, while the catch-all provision of Art. 19.15 includes the remaining part of the national provision trasnposing Art. 4(2) of the Directive.

incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.54 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Italy*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	NA	NA	Operation of an installation without a permit. ***Article 16(1) D.Lgs 59/2005***	Arrest not exceeding one year or fines from Euros 2,500 to 26,000. ***Article 16(1) D.Lgs 59/2005***
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELV's	Infringement or non-compliance with the following requirement: Obligation to notify the competent authority emission monitoring data. ***Article 16 of D.Lgs 59/2005***	Fines from Euros 2,500 to 11,000. ***Article 16 of D.Lgs 59/2005***	Non-compliance with the requirements of a permit. ***Article 16(2) D. Lgs 59/2005***	Fines from Euros 5,000 to 26,000. ***Article 16(2) D. Lgs 59/2005***

*ELVs: Emission Limit Values

Table 55.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Italy*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A	N/A	Construction and operation of an installation without a permit. ***Article 279(1) sentence 1 D.Lgs 152/2006*** Substantial change of the installation without permit. ***Article 279(1) sentence 2 D.Lgs 152/2006***	Imprisonment from 2 months up to 2 years or fines from Euros 258 to 1,032. ***Article 279(1) sentence 1 D.Lgs 152/2006*** Imprisonment up to 6 months or a fine up to Euros 1,032. ***Article 279(1) sentence 2 D.Lgs 152/2006***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to notify the competent authority emission monitoring data. ***Article 16 of D.Lgs 59/2005***	Fines from Euros 2,500 to 11,000. ***Article 16 of D.Lgs 59/2005***	Operation of an installation in breach of the requirements of the permit or the emission values. ***Article 279(2) D.Lgs 152/2006***	Imprisonment up to 1 year or a fine up to Euros 1,032. ***Article 279(2) D.Lgs 152/2006***

Table 2.56 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Italy*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations			Construction and operation of an installation without a permit. ***Article 279(1) sentence 1 D.Lgs 152/2006*** Substantial Change of the installation without permit. ***Article 279(1) sentence 2 D.Lgs 152/2006***	Imprisonment from 2 months up to 2 years or fines from Euros 258 to 1,032. ***Article 279(1) sentence 1 D.Lgs 152/2006*** Imprisonment up to 6 months or a fine up to Euros 1,032. ***Article 279(1) sentence 2 D.Lgs 152/2006***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	-	-
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to notify the competent authority emission monitoring data. ***Article 16 of D.Lgs 59/2005***	Fines from Euros 2,500 to 11,000. ***Article 16 of D.Lgs 59/2005***	Operation of an installation in breach of the requirements of the permit or the emission values. ***Article 279(2) D.Lgs 152/2006***	Imprisonment up to 1 year or a fine up to Euros 1,032. ***Article 279(2) D.Lgs 152/2006***

Table 2.57 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Italy*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to comply with any provision in this decree not covered by other provisions of Art.19, including the obligation to obtain a permit in case of substantial change. ***Article 19(15) D.Lgs 133/2005***	Fines from Euros 1,000 to 35,000. ***Article 19(15) D.Lgs 133/2005***	1. Activity of incineration or co-incineration of hazardous waste without permit. ***Article 19(1) D.Lgs 133/2005*** 2. Activity of incineration or co-incineration of non-hazardous waste in plants without permit, ***Article 19(2) D.Lgs 133/2005***	1. Arrest from 1 to 2 years or a fine from Euros 10,000 to 50,000. ***Article 19(1) D.Lgs 133/2005*** 2. Arrest from 6 months to 1 year and a fine from Euros 10,000 to 30,000. ***Article 19(12) D.Lgs 133/2005***
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to comply with any provision in this decree not covered by other provisions of Art.19, including the supply of (correct) information. ***Article 19(15) D.Lgs 133/2005***	Fines from Euros 1,000 to 35,000. ***Article 19(15) D.Lgs 133/2005***	Non-compliance with specific requirements of the permit, e.g. preventive measures against pollution of the environment. ***Article 4(2) D.Lgs 133/2005, Article 19(12) D.Lgs 133/2005***	Various penalties up to 3 years of imprisonment and fines up to Euros 51,645.69. ***Article 19(12) D.Lgs 133/2005***
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with any provision in this decree not covered by other provisions of Art.19, including some of the specific obligations covered under this obligation. ***Article 19(15) D.Lgs 133/2005*** Obligation to notify the competent authority emission monitoring data. ***Article 16 of D.Lgs 59/2005***	Fines from Euros 1,000 to 35,000. ***Article 19(15) D.Lgs 133/2005*** Fines from Euros 2,500 to 11,000. ***Article 16 of D.Lgs 59/2005***	1. Exceedance of emission limit values. ***Article 19(8) D.Lgs 133/2005*** 2. Non-compliance with limit values applicable to discharge of wastewater into surface water discharged from an incineration or co-incineration and from the cleaning of exhaust gases. ***Article 19(6) D.Lgs 133/2005*** 3. Failure to take necessary precautions concerning the delivery and reception of waste to prevent/ limit negative	1. Arrest of up to one year and a fine from Euros 10,000 to 25,000. ***Article 19(8) D.Lgs 133/2005*** 2. Arrest of up to six months and a fine of Euros 10,000 to 30,000. ***Article 19(6) D.Lgs 133/2005*** 3. Fines of Euros 3,000 to 30,000. ***Article 19(12) D.Lgs 133/2005***

			effects on the environment, meeting corresponding minimum requirements. ***Article 19(12) D.Lgs 133/2005***	

Annex XV-Latvia

LATVIA

1. Overview of penalties related to legislation on industrial installations

In Latvia, industrial installations are regulated by a variety of general and specific legal acts. The principle law concerning industrial installations is the Law on Pollution (adopted on 15 March 2001), which sets the basic principles of pollution prevention and control, as well as the basis for the permitting system for industrial pollution. Other important legal acts are: Regulations of the Cabinet No. 294 ("Procedures by which Polluting Activities of Category A, B and C shall be declared and Permits for the Performance of Category A and B Polluting Activities shall be Issued"), No. 379 ("Procedures by which emission of air polluting substances from stationary air pollution sources shall be prevented, restricted and controlled"), as well as the Waste Management Law and Regulations of the Cabinet No. 323 ("Requirements for the incineration of waste, and for the operation of waste incineration facilities") concerning the incineration of waste.

The Latvian Administrative Violation Code applies to infringements of the obligations specified in this report. It is the only act regulating penalties in case of infringements of the legislation transposing the four Directives.

Article 88^6 of the Administrative Violation Code applies penalties to both natural and legal persons specifically in relation to the first obligation for each Directive (namely to apply for a permit/authorisation/registration for new or existing installations), as well as the fourth obligation (to comply with the conditions set in the permit or mandatory Emission Limit Values (ELVs). Latvian law does not provide specific penalties for infringements of the remaining two obligations. Nevertheless, there is a catch-all provision in the Administrative Violation Code, which provides that it is an offence to conduct polluting activities which do not comply with the specific requirements of the regulatory enactments (Article 88^6).

There is no detailed description in Article 88^6 of those activities which do not comply with the specific requirements of the regulatory enactments. It could therefore be implied that any failure to comply with the requirements provided by the Law on Pollution, as well as Regulations of the Cabinet No. 294, No. 379 and No. 323, (i.e. all of the legislation regarding polluting activities), will also be subject to this provision. This means that Article 88^6 could include the remaining two obligations, namely to supply information for application of permits and to notify the competent authority of any changes in the operation of an installation. For example, Article 30(1) of the Law on Pollution provides that prior to a change in the operation of an installation an operator shall notify the Regional Environmental Board (the competent authority) thereof. If the operator has not fulfilled this obligation, it is considered a breach of the requirement of the Law on Pollution, which could result in application of penalties provided for in Article 88^6 of the Administrative Violation Code. Another example is Article 28 of Law on Pollution, which requires operators to supply certain information in the application for permits for the performance of category A and B polluting activities. Failure to comply with this requirement could be considered as non-compliance with the specific requirements of the regulatory enactments.

According to Article 88^6 of the Administrative Violations Code, in case of undertaking a polluting activity without the required permit, a fine should be imposed from Euros 213 up to 711 for natural persons and Euros 711 up to Euros 4,269 for legal persons. It is also provided that in case of failure to comply with the requirements of the permit for conducting polluting activities a fine should be imposed from Euros 142 up to Euros 640 for natural persons and Euros 285 up to Euros 2,134 for legal persons. If conducting polluting activities which do not comply with the specific requirements of the regulatory enactments a fine should be imposed from Euros 28 up to Euros 711 for natural persons and Euros 71 up to Euros 1,424 for legal persons.

The competent authorities in Latvia are the Regional Environmental Boards. They are responsible for

issuing, suspending and revoking permits for polluting activities. The Environment State Bureau examines complaints regarding the decisions of Regional Environmental Boards relating to the issuance of permits and permit conditions, the investigation of polluted or potentially polluted sites, and the covering or allocation of remediation and investigation or remediation expenditures. The Environment State Bureau also creates and maintains a register of permits issued, which is available, free of charge, to any natural or legal person.

There are no criminal sanctions provided for any breach of the obligations under these Directives, or to any general obligation relating to the environment concerning these Directives.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Latvia

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Latvia
IPPC Directive	
Catch-all	C
4	X
5	-
6	-
12 (1)	-
12 (2)	-
14 (a)	X
14 (b)	-
14 (c)	-
VOC Directive	
Catch-all	C
3(2)	X
4	-
5 (2)(a)	-
5 (2)(b)	-
5 (4)	-
5 (5)	-
5 (6)	-
5 (8)	-
5 (9)	-
5 (10)	-
8 (1)	-
9 (1)	-

10 (a)	-
LCP Directive	
Catch-all	C
4 (1)	-
4 (2)	-
4 (4)	-
5	-
7 (1)	-
9	-
10	-
13	-
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	-
4 (8)	-
5 (1)	-
5 (2), (3) & (4)	-
6	-
7	-
8 (1)	-
8 (4)	-
8 (5)	-
8 (7)	-
9	-
10 (1)	-
10 (2)	-
11	-
12 (2)	-
13 (2)	-
13 (3)	-
13 (4)	-

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Latvia. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.58 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Latvia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Undertaking a polluting activity without the required permit. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 150-500 (Euros 213 - 711). [143] Legal persons: LVL 500-3,000 (Euros 711 – 4,269). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELV's	Infringement or non-compliance with the following requirements: Obligation to comply with the requirements of the permit for conducting polluting activities. ***Article 88[6] Latvian Administrative Violation Code*** Obligation to comply with the specific requirements of the regulatory enactment in case of conducting polluting activity. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 100 – 450 (Euros 142 - 640). Legal persons: LVL 200 – 1,500 (Euros 285 – 2,134). ***Article 88[6] Latvian Administrative Violation Code*** Natural persons: LVL 20 - 500 (Euros 28 - 711). Legal persons: LVL 50 – 1,000 (Euros 71 – 1,424). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A

*ELVs: Emission Limit Values

[143] Calculated on the bases of the rate 1 LVL = 0.702804 EUR as on 8 December 2010

Table 59.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Latvia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Undertaking a polluting activity without the required permit. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 150-500 (Euros 213 - 711). Legal persons: LVL 500 - 3,000 (Euros 711 – 4,269). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELV's	Infringement or non-compliance with the following requirements : Obligation to comply with the requirements of the permit for conducting polluting activities. ***Article 88[6] Latvian Administrative Violation Code*** Obligation to comply with the specific requirements of the regulatory enactment in case of conducting polluting activity. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 100 – 450 (Euros 142 - 640). Legal persons: LVL 200 – 1,500 (Euros 285 - 2134). ***Article 88[6] Latvian Administrative Violation Code*** Natural persons: LVL 20 - 500 (Euros 28 - 711). Legal persons: LVL 50 – 1,000 (Euros 71 – 1,424). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A

Table 2.60 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Latvia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Undertaking a polluting activity without the required permit. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 150-500 (Euros 213 - 711). Legal persons: LVL 500-3,000 (Euros 711 – 4,269). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELV's	<u>Infringement or non-compliance with the following requirements:</u> Obligation to comply with the requirements of the permit for conducting polluting activities. ***Article 88[6] Latvian Administrative Violation Code*** Obligation to comply with the specific requirements of the regulatory enactment in case of conducting polluting activity. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 100 – 450 (Euros 142 - 640). Legal persons: LVL 200 – 1500 (Euros 285 – 2,134). ***Article 88[6] Latvian Administrative Violation Code*** Natural persons: LVL 20 - 500 (Euros 28 - 711). Legal persons: LVL 50 – 1,000 (Euros 71 – 1,424). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A

Table 2.61 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Latvia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Undertaking a polluting activity without the required permit. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 150-500 (Euros 213 - 711). Legal persons: LVL 500-3,000 (Euros 711 – 4,269). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permits or mandatory ELV's	Infringement or non-compliance with the following requirements: Obligation to comply with the requirements of the permit for conducting polluting activities. ***Article 88[6] Latvian Administrative Violation Code*** Obligation to comply with the specific requirements of the regulatory enactment in case of conducting polluting activity. ***Article 88[6] Latvian Administrative Violation Code***	Natural persons: LVL 100 – 450 (Euros 142 - 640). Legal persons: LVL 200 – 1500 (Euros 285 - 2134). ***Article 88[6] Latvian Administrative Violation Code*** Natural persons: LVL 20 - 500 (Euros 28 - 711). Legal persons: LVL 50 – 1,000 (Euros 71 – 1,424). ***Article 88[6] Latvian Administrative Violation Code***	N/A	N/A

Annex XVI-Lithuania

LITHUANIA

1. Overview of penalties related to legislation on industrial installations

In Lithuania, the legislation relating to industrial installations is comprised of a range of laws and regulations (primary or secondary legal acts). The Criminal Code of the Republic of Lithuania (CC) as amended,[144] and the Code of Administrative Offences of the Republic of Lithuania (CoAO) as amended[145] apply to the enforcement of the Law on Environmental Protection of the Republic of Lithuania (LoEP) (as amended). [146]

The main laws governing the operation of industrial installations are:
The Law on Environmental Protection of the Republic of Lithuania (LoEP) - Article 19 requires, inter alia, legal and natural persons to obtain authorisation prior to commencing the operation of objects of economic activities and to comply with the conditions of authorisation for such activities. It also requires such persons not to violate regulations and standards of environmental protection;

Transposing legislation of the IPPC Directive: A secondary legal act (regulations) titled "The Rules on Issuance, Renewal and Revocation of Integrated Pollution Prevention and Control Permits" ((("the IPPC Rules") - establishes detailed permitting procedures including who should apply for a permit, when they should apply, and how they should apply).

Transposing legislation of the VOC Directive: A secondary legal act (regulations) titled "Procedure for limitation of emissions of volatile organic compounds generated due to the usage of solvents in certain activities"[147] establishes requirements related to the registration and mandatory Emission Limit Values (ELVs) for VOC activities;

Transposing legislation of the LCP Directive: A secondary legal act (regulations) titled "Emission Values of Pollutants Emitted from the Large Combustion Installations"[148] establishes mandatory ELVs for LCPs;

Transposing legislation of the WI Directive: A secondary legal act (regulations) titled "The environmental requirements for waste incineration"[149] establishes mandatory ELVs.

Article 34 of the LoEP links the requirements in the above legislation with the Criminal Code and with the Code of Administrative Offences. It provides that *a person who breaches the requirements*

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[144] Criminal Code of the Republic of Lithuania (Lietuvos Respublikos baudžiamasis kodeksas), *Valstybės žinios*, 2000, No 89-2741. http://www3.lrs.lt/pls/inter3/dokpaieska.susije_l?p_id=111555&p_rys_id=14, as last amended on 11 February 2010 by the Law No XI-677.

[145] Code of Administrative Offences (Lietuvos Respublikos administracinių teisės pažeidimų kodeksas), *Valstybės žinios*, 1985, No 1-1; 2002, No 112-4972, as last amended on 12 October 2010 by the Law No XI-1060

[146] Law on Environmental Protection of the Republic of Lithuania (Lietuvos Respublikos aplinkos apsaugos įstatymas), *Valstybės žinios*, 1992, No 5-75), http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=377606, as last amended by the Law XI-858 of 2010-05-28.

[147] Procedure for limitation of emissions of volatile organic compounds generated due to the usage of solvents in certain activities (Lakiųjų organinių junginių, susidarančių naudojant tirpiklius tam tikrų veiklos rūšių įrenginiuose, emisijos ribojimo tvarka), *Valsty bės žinios*, 2003, No 15-634, as last amended by the Minister of Environment Order No D1-562 of 2010-06-22, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=377067

[148] Emission values of pollutants emitted from the large combustion installations (Išmetamų teršalų iš didelių kurą deginančių įrenginių normos), *Valsty bės žinios*, 2004, No 37-1210, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=228233&p_query=&p_tr2=

[149] The environmental requirements for waste incineration (Atliekų deginimo aplinkosauginiai reikalavimai), *Valsty bės žinios*, 2003, No 31-1290, as last amended by the Minister of Environment Order D1-835 of 1October 2010, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=207966&p_query=&p_tr2=

governing environmental protection shall be held liable under laws of the Republic of Lithuania. This blanket provision means that the Code of Administrative Offences or the Criminal Code can be applied in cases of violations of environmental requirements. Liability is the same for both legal and natural persons.

The Code of Administrative Offences (CoAO) is the primary legislation for determining administrative sanctions for breaches of environmental legislation. Article 9(1) of the CoAO provides that "Administrative offence means illegal behaviour (action or omission) committed intentionally or by negligence which interferes with public order, ownership, citizens rights or freedom, disciple of administrative procedures and for which the law provides administrative liability". Administrative sanctions can also be taken if an offender potentially endangers the environment.

Administrative sanctions under the CoAO are measures (tools, means, instruments, etc.) of liability, which are imposed on natural persons (citizens). Legal persons are not considered liable but administrative liability can be imposed on "officials". Managers of legal entities and heads of municipal institutions are considered as "officials". Officials mean persons who have the right to exercise public administration functions, and persons who implement organizational and management executive power within public institution, an enterprise or an organisation (Article 14 (1) of the CoAO). Sanctions are also stricter for "officials".

The purpose of administrative sanctions is to punish persons who commit offences and to prevent them from violating the law in the future. The CoAO lays down sanctions for violation of environmental legislation which include warnings fines and removal of the right to hold a certain position. Fines are the main sanctions enforced for most administrative offences. Generally fines for environmental offences range from Litas 25 (Euros 7.2) to Litas 60,000 (Euros 17,377).

The CoAO applies in cases where the violation of environmental legislation causes or could cause minor damage to the environment. Article 51-2 of the CoAO provides that operation of economic or other activities without authorization, or usage of installations without permits, if such permits are required under the laws or official orders, or in violation of environmental protection requirements or standards, will incur a penalty of between Litas 800 to 1500 (Euros 232 to 434) for citizens and between Litas 1,000 to 3,000 (Euros 290 to 869) for officials. For repeated administrative offences the penalty is Litas 4,000 to 8,000 (Euros 1,158 to 2,317) for citizens and for officials.[150]

In accordance with Article 31 of the Law on Environmental Protection (LoEP) "In the Republic of Lithuania, the state control of environmental protection and utilisation of natural resources shall be exercised by officials of the system of the Ministry of Environment – state inspectors of environmental protection.

Their powers include, inter alia, the right to restrict the activities of legal and natural persons where laws on environmental protection are being violated or where these activities do not comply with the conditions established in respect of environmental protection. They also hear cases of administrative offences and impose administrative penalties.

Article 270 of the Criminal Code (CC) provides general criminal liability (for natural and legal persons) where the violation of environmental legislation causes or could cause damage to the fauna, flora or other serious or negligible effects on the environment. "Negligible" means insignificant consequences to the environment, such as short term exceedance of emissions established in IPPC permits causing inconvenience to residents (smell, noise from an installation), Criminal liability for "negligible" effects can arise only if the administrative sanctions cannot solve the problem. Criminal penalties are generally seen as a way of prevention of serious offences.

[150] 1 Euros = 3.45 Lita (12 December 2010)

In addition to a fine, if environmental damage ensues as a result of non-compliance with the laws, the person must also pay damages for harm caused to the natural environment. In this context Article 32 of the Law on Environmental Protection provides for damages to be collected in a government controlled environmental fund called the Environmental Support Program.[151]

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Lithuania

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Lithuania
IPPC Directive	
Catch-all	-
4	X
5	X
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VoC Directive	
Catch-all	-
3(2)	X
4(4)	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X

[151] This fund is controlled by the Environmental Protection Ministry; 40% are used to compensate damage caused to the natural environment, 30% of funds are used for remuneration of employees (inspectors) and the remaining amount is used for education, social work and other purposes.

5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Lithuania. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.

- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.62 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Lithuania*

CC: Criminal Code
CoAO: Code of Administrative Offences
LoEP: Law on Environmental Protection
IPPC Rules: Rules on Issuance, Renewal and Revocation of IPPC Permits[152]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an object of economic activities without obtaining an authorisation. ***Article 19-1 of the LoEP*** requires that legal and natural persons must, prior to commencing the operation of objects of economic activities and pursuit of economic activities, obtain an authorisation. The IPPC Rules establish a detailed permitting procedure, including obligation to apply for a permit in due time for new and existing installations. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Fines: Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320). Officials[153]: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320). ***Article 34 of the LoEP and Article 51-2, part 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to supply	Infringement or non-compliance with the	Natural persons: Fine of Litas 800 to	N/A	N/A

[152] Rules on Issuance, Renewal and Revocation of Integrated Pollution Prevention and Control Permits (Taršos integruotos prevencijos ir kontrolės leidimų išdavimo, atnaujinimo ir panaikinimo taisyklės), *Valstybės žinios*, 2002, No 85-3684, as last amended by the Minister of Environment Order No D1-63 of 2010-01-25, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=181470&p_query=&p_tr2=

[153] Note: "Officials" mean persons who have the right to exercise public administration functions, and persons who implement organizational and management executive power within public institution, an enterprise or an organisation. Managers of companies, heads of municipal institutions are considered as "officials".

information for application for permits	following requirements: Obligation to comply with Article 19-2 of the LoEP, which requires that legal and natural persons must operate objects of economic activities under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. Obligation to supply information for application for permits in line with the IPPC Rules. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	8,000 (of Euros 232 to 2,320). Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2 320). ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***		
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19-2 of the LoEP,*** which requires that legal and natural persons must operate objects of economic activities under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. Obligation to notify the regional environmental protection departments of any changes in the operation of an installation .in line with IPPC rules. If operators do not implement the requirements, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320). Officials: Fine of Litas 1,000 to 8,000 Euros 290 to 2,320). ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with conditions set in the permit.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320). Officials: Fine of Litas 1,000 to 8,000	Violation of the regulations governing environmental protection if the offence has caused or could cause damage to the environment.	Natural persons: • community work of 1 to 12 month or • fine of Euros 38 to 7,530, or • restriction of liberty of 3 to 36 month,

	Obligation of natural or legal persons to operate objects of economic activities under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. ***Article 19-2 of the LoEP*** Obligation to comply with the relevant IPPC rules/ conditions. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	(of Euros 290 to 2 320). ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	***Articles 19-2 of the LoEP*** requires that legal and natural persons must operate objects of economic activities under the conditions established in the authorisation.	or • arrest of 10 to 90 days • imprisonment for a term of up to six years . Legal persons: • fine of up to Euros 376,530. ***CC, Article 270***

Table 63.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Lithuania*

CC: Criminal Code
CoAO: Code of Administrative Offences
LoEP: Law on Environmental Protection
IPPC Rules: Rules on Issuance, Renewal and Revocation of IPPC Permits
VOC Procedure: Procedure for limitation of emissions of volatile organic compounds generated due to the usage of solvents in certain activities[154]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Operating an object of economic activities without an authorisation prior to commencing the economic activities. ***Article 19-1 of the Law on Environmental Protection (LoEP)*** requires that legal and natural persons must, prior to commencing the operation of objects of economic activities and pursuit of economic activities, obtain an authorisation. ***The IPPC Rules*** include an obligation to apply for a permit in due time for a new and existing installations. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320). Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2 320). ***Article 34 of the Law on Environmental Protection and Code of Administrative Offences, Article 51-2, part 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to supply	Infringement or non-compliance with the		N/A	N/A

[154] Procedure for limitation of emissions of volatile organic compounds generated due to the usage of solvents in certain activities (Lakiųjų organinių junginių, susidarančių naudojant tirpiklius tam tikrų veiklos rūšių įrenginiuose, emisijos ribojimo tvarka), *Valsty bės žinios*, 2003, No 15-634, as last amended by the Minister of Environment Order No D1-562 of 2010-06-22, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=377067

information for application for permits	<u>following requirements:</u> Obligation to comply with Article 19-2 of the LoEP and with the IPPC Rules or with the VOC Procedure. Obligation to supply information in the permit application to the State environmental protection department in line with the relevant IPPC rules. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320). Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320) ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***		
Obligation to notify the competent authority of any changes in the operation of an installation	<u>Infringement or non-compliance with the following requirements:</u> Obligation to comply with *Article 19-2 **of the Law on Environmental Protection** LoEP* and with the *IPPC Rules* or with the *VOC Procedure*. Obligation to notify the regional environmental protection departments of any changes in the operation of an installation in accordance with the IPPC Rules. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320). Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320). *Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8* ***of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	<u>Infringement or non-compliance with the following requirements:</u> Obligation to comply with *Article 19-2 of the LoEP* and with the *IPPC Rules* or with the *VOC Procedure.*	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320).	Violation of the regulations governing environmental protection if the offence has caused or could cause damage to the environment	CC, Article 270 Natural persons: • community work of 1 to 12 month or • fine of Euros 38 to 7,530, or

	Obligation of legal and natural persons to operate objects of economic activities under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. ***Article 19-2 of the LoEP*** Obligation to comply with the IPPC Rules establishes permitting conditions in detail including obligations to comply with those conditions. If operators do not implement the requirement, Article 51-9 of the CAO may be applied. *VOC Procedure* establishes requirements related to the registration and mandatory ELVs .	Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320). ***Article 34 of the LoEP and Article 51-2, section 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58). Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	***Article 19-2 of the LoEP*** requires that legal and natural persons must operate objects of economic activities under the conditions established in the authorisation.	• restriction of liberty of 3 to 36 month, or • arrest of 10 to 90 days • imprisonment for a term of up to six years. Legal persons: fine of up to Euros 376,530.

Table 2.64 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Lithuania*

CC: Criminal Code
CoAO: Code of Administrative Offences
LoEP: Law on Environmental Protection
IPPC Rules: Rules on Issuance, Renewal and Revocation of IPPC Permits
LCP Emission Values: Emission Values of Pollutants Emitted from the Large Combustion Installations[155]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an object of economic activity without obtaining an authorisation prior to commencing the operation. ***Article 19-1 of the LoEP*** requires that legal and natural persons must, prior to commencing the operation of objects of economic activities and pursuit of economic activities, obtain an authorisation. ***The IPPC Rules*** include an obligation to apply for a permit in due time for a new and existing installations. If operators do not implement the requirements, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320) Officials: Fine of 1,000 to 8,000 Litas (Euros 290 to 2,320) ***Article 34 of the Law on Environmental Protection and Code of Administrative Offences, Article 51-2, part 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19-2 of the LoEP*** and with the *IPPC Rules*	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320)	N/A	N/A

[155] Emission values of pollutants emitted from the large combustion installations (Išmetamų teršalų iš didelių kurą deginančių įrenginių normos), *Valsty bės žinios*, 2004, No 37-1210, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=228233&p_query=&p_tr2=

	In particular, obligation of the operator to supply information in the permit application to the State environmental protection department in accordance with the IPPC Rules. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Officials: Fine of Litas 1000 to 8000 (Euros 290 to 2 320) ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***		
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19-2 of the LoEP*** and with the IPPC Rules. Obligation included in IPPC rules to notify regional environmental protection departments of any changes in the operation of an installation If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Natural persons: Fine of 800 to 8,000 Litas (Euros 232 to 2,320) Officials: Fine of 1000 to 8,000 Litas (Euros 290 to 2,320). ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19-2 of the LoEP*** and with the ***IPPC Rules*** or with the ***LCP Emission Values (***establishing mandatory ELVs) ***Article 19(2) of the LoEP*** requires that	Natural persons: Fine of 800 to 8,000 Litas (Euros 232 to 2,320) Officials: Fine of 1,000 to 8,000 Litas (Euros 290 to 2,320). ***Article 34 of the LoEP and Article 51-2,***	Violation of the regulations governing environmental protection if the offence has caused or could cause damage to the environment. ***Article 19(2) of the LoEP*** requires that legal and natural persons must operate objects of economic activities under the	CC, Article 270 Natural persons: • community work of 1 to 12 month or • fine of Euros 38 to 7,530, or • restriction of liberty of 3 to 36 month, or • arrest of 10 to 90 days

	legal and natural persons must operate objects of economic activities under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. Obligation included in IPPC rules to comply with its conditions. If operators do not implement the requirements, Article 51-9 of the CAO may be applied.	***section 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	conditions established in the authorisation and not in violation of the regulations and standards of environmental protection.	• imprisonment for a term of up to six years Legal persons: fine of up to Euros 376,530.

Table 2.65 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Lithuania*

CC: Criminal Code
CoAO: Code of Administrative Offences
LoEP: Law on Environmental Protection
IPPC Rules: Rules on Issuance, Renewal and Revocation of IPPC Permits
Requirements for WI: The environmental requirements for waste incineration[156]

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an object of economic activity without authorisation prior to commencing the operation. ***Article 19-1 of the LoEP*** requires that legal and natural persons must, prior to commencing the operation of objects of economic activities and pursuit of economic activities, obtain an authorisation. ***The IPPC Rules*** establish a detailed permitting procedure, including obligation to apply for a permit in due time for a new and existing installations. If operators do not implement the requirements, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320) Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320) ***Article 34 of the Law on Environmental Protection and Code of Administrative Offences, Article 51-2, part 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19-2 of the LoEP*** and with the ***IPPC Rules***	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320)	N/A	N/A

[156] The environmental requirements for waste incineration (Atliekų deginimo aplinkosauginiai reikalavimai), *Valsty bės žinios*, 2003, No 31-1290, as last amended by the Minister of Environment Order D1-835 of 1October 2010, http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=207966&p_query=&p_tr2=

	Obligation of legal and natural persons to operate objects of economic activities under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. ***Article 19-2 of the LoEP*** Obligation to comply with the IPPC Rules establishes permitting conditions in detail including obligations to comply with those conditions. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320) ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***		
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19-2 of the LoEP*** and with the ***IPPC Rules*** Obligation to notify regional environmental protection departments of any changes in the operation of an installation, in accordance with the IPPC rules. If operators do not implement the requirement, Article 51-9 of the CAO may be applied.	Natural persons: Fine of Litas 800 to 8,000 (Euros 232 to 2,320) Officials: Fine of 1,000 to Litas 8,000 (Euros 290 to 2,320) ***Article 34 of the LoEP and Article 51-2, part 2 or Article 51-8 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	N/A	N/A
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with ***Article 19(2) of the LoEP*** and with the ***IPPC Rules*** or with the ***Requirements for WI*** (establishing mandatory ELVs). Obligation of legal and natural persons to operate objects of economic activities	Officials: Fine of Litas 800 to 8,000 (Euros 232 to 2,320) Officials: Fine of Litas 1,000 to 8,000 (Euros 290 to 2,320)	Violation of the regulations governing environmental protection if the offence has caused or could cause damage to the environment. ***Article 19(2) of the LoEP*** requires that legal and natural persons must operate objects of economic activities under the	CC, Article 270 Natural persons: • community work of 1 to 12 month or • fine of Euros 38 to 7,530, or • restriction of liberty of 3 to 36 month, or • arrest of 10 to 90 days • imprisonment for a term of up to six

	under the conditions established in the authorisation and not in violation of the regulations and standards of environmental protection. ***Article 19 (2) of the LoEP*** Obligation to comply with conditions laid down in IPPC Rules establishing permitting conditions in detail. If operators do not implement the requirements. ***Article 51-9 of the CAO may be applied.***	***Article 34 of the LoEP and Article 51-2, part 2 of the CoAO*** Fines for breach of IPPC Rules: Natural persons: from Litas 100 (Euros 29) to Litas 200 (Euros 58) Officials: from Litas 300 (Euros 89) to Litas 600 (Euros 174). ***Article 51-9 of the CoAO***	conditions established in the authorisation and not in violation of the regulations and standards of environmental protection.	years Legal persons: fine of up to Euros 376,530.

Annex XVII-Luxembourg

LUXEMBOURG

1. Overview of penalties related to legislation on industrial installations

Directive 2008/1/EC was transposed by the Law on classified installations,[157] which sets the offences and the related administrative and criminal sanctions.

Directive 1999/13/EC was transposed in the Grand-Duchy legal order by the Grand Ducal Regulation of 11 March 2001 transposing Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations.[158] This Regulation does not contain any provisions on penalties. Plants emitting volatile organic compounds due to the use of organic solvents are considered as installations that fall under the Law on classified installations.[159] Therefore the sanctions listed in the Law on classified installations shall also apply to plants emitting volatile organic compound due to the use of organic solvents. The specific requirements of Directive 1999/13/EC as transposed in the Grand Duchy legislation shall be considered as specific conditions set in the authorisation for classified installations to be fulfilled by the operators of these plants (See Article 13(1) of the Law on classified installations).[160]

Directive 2001/80/EC was transposed by the Grand Ducal Regulation of 9 May 2003 implementing Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants.[161] Similarly to the Regulation of 11 Marche 2001, this Regulation does not contain any provisions on penalties. Waste incineration plants are considered as installations that fall under the Law on classified installations.[162] Therefore the sanctions listed in the Law on classified installations shall also apply for the large combustion plants as defined under Directive 2001/80/EC. The specific requirements of Directive 2001/80/EC as transposed in the Grand Duchy legislation shall be considered as specific conditions set in the authorisation for classified installations to be fulfilled by the operators of the large combustion plants.

Directive 2000/76/EC was transposed in the Grand-Duchy legal Order by the Grand-Ducal Regulation of 19 of December 2002 relating to the incineration of waste[163] and does not contain any provisions on penalties. Waste incineration plants are also considered as installations that fall under the Law on classified installations (see point 122 (4) of the list of installations under the Grand Ducal Regulation on classification of installations).[164] Therefore the sanctions listed in the Law on classified installations shall also apply for the waste incineration plants. The specific requirements of Directive 2000/76/EC shall be considered as specific conditions set in the authorisation for classified installations to be fulfilled by the operators of the waste incineration plants.

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[157] Loi modifée du 10 juin 1999 relative aux établissements classés

[158] Règlement grand-ducal du 4 juin 2001 portant application de la directive 1999/13/CE du Conseil du 11 mars 1999 relative à la réduction des émissions de composés organiques volatils dues à l'utilisation de solvants organiques dans certaines activités et installations.

[159] Règlement grand-ducal modifié du 16 juillet 1999 portant nomenclature et classification des établissements classés, point 321 (A) of the list of installations.

[160] Translation of Article 13(1) third paragraph reads as follow: If an environmental quality standard requires more severe conditions than those attainable for the use of the best available technologies, additional conditions are especially required by the authorization, without prejudice to other measures which can be taken to respect the environmental quality standards.

[161] Règlement grand-ducal du 9 mai 2003 portant application de la directive 2001/80/CE du Parlement Européen et du Conseil du 23 octobre 2001 relative à la limitation des émissions de certains polluants dans l'atmosphère en provenance des grandes installations de combustion

[162] See point 144(1)(b) of the list of installations under the Grand Ducal Regulation on classification of installations

[163] Règlement grand-ducal du 19 décembre 2002 concernant l'incinération des déchets

[164] See point 122 (4) of the list of installations under the Grand Ducal Regulation on classification of installations

Both administrative sanctions and criminal sanctions can apply for the infringement of environmental Law in Luxembourg.

Administrative sanctions related to industrial installations were already established in the Royal Grand Ducal Regulation of June 1872 on dangerous and unhealthy establishments[165] empowering authorities to close an installation infringing the conditions set forth in the authorisation. Administrative sanctions are the most common sanctions for the application of environmental law in Luxembourg. They are considered easier to apply, the administrative procedure being quicker and more flexible than the criminal procedure. The administrative sanctions in the Law on classified installations, which is the main legislation for industrial installation, do not include fines but the suspension or closure of the activity in part or totally.

Unlike administrative sanctions the determination of criminal sanctions shall take into account subjective elements (e.g. the intent). Furthermore, imprisonment sanctions can only be imposed under the criminal procedure. The criminal sanctions in the Law on classified installations can lead to imprisonment of eight days to six months and/or a fine up to Euros 125,000 for natural persons. Until recently there were no criminal sanctions for legal persons in Luxembourg. Since the promulgation of the Law of 3 March 2010 establishing criminal liability for legal entities, legal entities can be held criminally liable for the offences committed in their names, on their behalf, and in their interest. The scope of the Law is general and covers any kind of offences leading to criminal penalties for natural persons. The criminal sanctions for legal persons can lead to a fine up to Euros 750,000, the confiscation, the exclusion from participation in public procurement and in specific cases the dissolution of the legal person.[166]

Several administrative bodies within their domain of competence (e.g. the Environment Agency, the Water Management Agency, the Health and Safety Inspectorate, the Customs) are all responsible for investigating and recording offences punished by the Law on classified installations. They are empowered to visit, during the day and even at night and without prior notification, the installations, premises, land, facilities and means of transport subject to this Act and its implementing regulations.

2. Review of offences and sanctions

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions, which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive, are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code, which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been

[165] L'arrêté royal grand-ducal du 17 juin 1872 concernant le régime de certains établissements industriels
[166] See Articles 34 of 40 of the Criminal Code of Luxembourg, available at: http://www.legilux.public.lu/leg/textescoordonnes/codes/code_penal/cp_L1.pdf

transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

a) Enforceable provisions covered by penalties in Luxembourg

Article	Luxembourg
IPPC Directive	
Catch-all	
4	X
5	
6	
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	
4(4)	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (4)	
5	
7 (1)	
9	
10	
13	
WI Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	
10 (1)	
10 (2)	
11	
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Luxembourg. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.66 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Luxembourg*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Failure to comply with the provisions of Article 4 of the Law on classified installations that list the installations that shall require a permit and who shall grant this permit. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 4 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***	Failure to comply with the provisions of Article 4 of the Law on classified installations that list the installations that shall require a permit and who shall grant this permit. ***Article 25(1) of the Law on classified installations***	Sanctions for Individual persons: imprisonment of eight days to six months and/or a fine of Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** -the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified installations*** Sanctions for legal persons: Fine: From Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement; ***Article 35 to 40 of the Criminal Code***
Obligation to supply information for application for permits	Not considered an administrative offence		Not considered a criminal offence	
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to comply with Article 6 of the Law on classified installations that require the operator to notify the competent authority of any changes in the operation of an installation. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 6 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the	Failure to comply with Article 6 of the Law on classified installations that require the operator to notify the competent authority of any changes in the operation of an installation. ***Article 25(1) of the Law on classified installations***	Sanctions for Individual persons: Imprisonment of eight days to six months and/or a fine of Euros 251 to 125 000 ***Article 25(1) of the Law on classified installations*** Sanctions for legal persons:

		establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***		Fine: from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Article 35 to 40 of the Criminal Code***
Obligation to comply with the conditions set in the permit or mandatory ELVs	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the layout and operating conditions of the classified installations. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 13 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the conditions for the operation and the planning of the classified installations. ***Article 25(1) of the Law on classified installations***	Sanctions for individual persons: imprisonment of eight days to six months and/or a fine from Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** -the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified installations*** Sanctions for legal persons: Fine: from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Article 35 to 40 of the Criminal Code***

*ELVs: Emission Limit Values

Table 67.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Luxembourg*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Failure to comply with the provisions of Article 4 of the Law on classified installations that list the installations that shall require a permit and who shall grant this permit. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 4 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***	Failure to comply with the provisions of Article 4 of the Law on classified installations that list the installations that shall require a permit and who shall grant this permit. ***Article 25(1) of the Law on classified installations***	Sanctions for individual persons: imprisonment of eight days to six months and/or a fine from Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified installations*** Sanctions for legal persons: A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Articles 35 to 40 of the Criminal Code***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the layout and operating conditions of the	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 13 of	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the conditions for the operation and the	Sanctions for individual persons: Imprisonment of eight days to six months and/or a fine from Euros 251 to

mandatory ELVs	classified installations. ***Article 27(1) of the Law on classified installations***	the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***	planning of the classified installations. ***Article 25(1) of the Law on classified installations***	125,000 ***Article 25(1) of the Law on classified installations*** -the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified installations*** Sanctions for legal persons: A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Articles 35 to 40 of the Criminal Code***

Table 2.68 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Luxembourg*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to comply with Article 6 of the Law on classified installations that require the operator to notify the competent authority of any changes in the operation of an installation. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 6 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27 (1) of the Law on classified installations***	Failure to comply with Article 6 of the Law on classified installations that require the operator to notify the competent authority of any changes in the operation of an installation. ***Article 25 (1) of the Law on classified installations***	Sanctions for individual persons: Imprisonment of eight days to six months and/or a fine from Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** Sanctions for legal persons: A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Articles 35 to 40 of the Criminal Code***
Obligation to comply with the conditions set in the permit or mandatory ELVs	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the layout and operating conditions of the classified installations. ***Article 27 (1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 13 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed.	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the conditions for the operation and the planning of the classified installations. ***Article 25 (1) of the Law on classified installations***	Sanctions for individual persons: Imprisonment of eight days to six months and/or a fine of Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** -the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified***

		(Article 27 (1) of the Law on classified installations)		***installations*** Sanctions for legal persons: A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Article 35 to 40 of the Criminal Code***

Table 2.69 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Luxembourg*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Failure to comply with the provisions of Article 4 of the Law on classified installations that list the installations that shall require a permit and who shall grant this permit. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 4 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***	Failure to comply with the provisions of Article 4 of the Law on classified installations that list the installations that shall require a permit and who shall grant this permit. ***Article 25(1) of the Law on classified installations***	Sanctions for individual persons: imprisonment of eight days to six months and/or a fine of Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** -the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified installations*** Sanctions for legal persons: A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Article 35 to 40 of the Criminal Code***
Obligation to supply information for application for permits	Not considered an administrative offence		Not considered a criminal offence	
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to comply with Article 6 of the Law on classified installations that require the operator to notify the competent authority of any changes in the operation of an installation. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 6 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a	Failure to comply with Article 6 of the Law on classified installations that require the operator to notify the competent authority of any changes in the operation of an installation. ***Article 25(1) of the Law on classified installations***	Sanctions for individual persons: imprisonment of eight days to six months and/or a fine from Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** Sanctions for legal persons:

		temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27(1) of the Law on classified installations***		A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Article 35 to 40 of the Criminal Code***
Obligation to comply with the conditions set in the permits or mandatory ELVs	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the layout and operating conditions of the classified installations. ***Article 27(1) of the Law on classified installations***	The relevant national authorities can grant the operator of an establishment a period in which the latter must comply with the infringement of Article 13 of the Law on classified installations. This period may not be more than two years; then the relevant authority can suspend after giving formal notice, all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. ***Article 27 (1) of the Law on classified installations***	Failure to comply with Article 13 of the Law on classified installations that provide that the permit shall set the conditions for the operation and the planning of the classified installations. ***Article 25 (1) of the Law on classified installations***	Sanctions for individual persons: imprisonment of eight days to six months and/or a fine of Euros 251 to 125,000 ***Article 25(1) of the Law on classified installations*** -the closure of the establishment (possibility to issue coercive measure like daily penalties until the establishment is closed) ***Article 25(2) of the Law on classified installations*** Sanctions for legal persons: A fine from Euros 500 to a maximum of 750,000 -Special confiscation; -Exclusion from participation in public procurement. ***Article 35 to 40 of the Criminal Code***

Annex XVIII-Malta

MALTA

1. Overview of penalties related to legislation on industrial installations

The Environment Protection Act 2001 (Chapter 435 of the Revised Laws of Malta) is the primary legislation for the protection of the environment. In accordance with Article 9 of the Act, the Minister responsible for the environment has the power to issue subsidiary or secondary legislation. This includes the transposing legislation for the EU Directives relating to industrial installations:

IPPC Directive: Legal Notice 234 of 2002 (LN 234/2002), Integrated Pollution Prevention and Control Regulations, 2002 as amended by Legal Notice 230 of 2004 (LN 230/2004) and Legal Notice 56 of 2008 (LN 56/2008);

VOC Directive: Legal Notice 349 of 2010 (LN 349/2010), Limitation of Emissions of Volatile Organic Compounds Regulations, 2010;

LCP Directive: Legal Notice 172 of 2010 (LN 172/2010), Large Combustion Plants Regulations 2010;

WI Directive: Legal Notice 336 of 2001 (LN 336/2001), Waste Management (Incineration) Regulations, 2001 and Legal Notice 337 of 2001 (LN 337/2001), Waste Management (Permit and Control) Regulations, 2001;

With respect to the IPPC Directive, it must be noted that Malta has not yet transposed Directive 2008/1/EC and therefore the national law currently in force is that which transposes Directive 96/61/EC as amended by Directives 2003/87/EC and 2003/85/EC.

Administrative sanctions do not apply to Malta with regard to industrial installations

Liabilities for breach of relevant provisions in Malta are primarily criminal in nature. Criminal penalties range from fines (*multa*) of 1,000 to 2,330 Euros for a first conviction, and up to Euros 11,600 and/or imprisonment for a term not exceeding two years for second or subsequent convictions. Breaches of IPPC-enforceable provisions also incur liabilities for expenses incurred by the competent authority as a result of the offence and confiscation of the *corpus delicti* (material evidence). "The operator" can include natural or legal persons who operate or control the installation.

The Malta Environment and Planning Authority (MEPA) is the competent authority responsible for issuing environmental permits, ensuring compliance through monitoring and enforcing the regulations if they are breached. In accordance with the provisions of Part X of the Environment Protection Act (EPA) on enforcement, the Minister responsible for the environment may bestow upon the MEPA environment inspector, executive powers against offenders. MEPA inspectors also have the power to prosecute offences under the EPA and any of the regulations issued thereunder. If the Minister does not give the environment inspectors these executive powers, the Executive Police always have the power under the Criminal Code (Chapter 9 of the Revised Laws of Malta) to enforce the law and prosecute offenders. There is also the possibility of reaching out of court settlements for offences committed under the EPA and the regulations, through the payment of a fine, which is deposited in the Environment Fund.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Malta

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Malta
IPPC Directive	
Catch-all	C
4	X
5	X
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X

8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Malta. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.70 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Malta*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	A person shall be guilty of an offence under the regulations if: (a) he fails to comply with any provision of the regulations; (b) he contravenes any restriction, prohibition or requirement imposed under the regulations; (c) he acts in contravention of any of the provisions of the regulations; (d) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of the regulations or to fail to comply with any such provisions, including any order lawfully given in terms of the regulations, or to contravene any restriction, prohibition or requirement imposed by or under the regulations. ***Regulation 33 of LN 234/2002***	Any person who commits an offence against the regulations shall, on conviction, be liable: (a) on a first conviction to a fine (*multa*) of not less than 500 Maltese Liri (Euros 1,165) but not exceeding 1000 Maltese Liri (Euros 2,330); (b) on a second or subsequent convictions, to a fine (*multa*) of not less than 1000 Maltese Liri (Euros 2,330), but not exceeding 2000 Maltese Liri (Euros 4,660) and/or to imprisonment for a term not exceeding two years. When a person is found guilty of committing an offence by means of a vehicle, the owner of the vehicle, where applicable, is held liable in the same manner and degree. Moreover, the Court shall order any person found guilty of committing an offence against the regulations to pay for the expenses incurred by the competent authority as a result of the offence, the revocation of the permit issued by the competent authority and confiscation of the *corpus delicti*, including the vehicle, if applicable. ***Regulation 34 of LN 234/2002*** Regulation 35 of LN 234/2002 makes certain provisions of the Criminal Code (namely, those relating to the forfeiture

				of the *corpus delicti* and disqualifications in case of convictions) applicable to proceedings in respect of offences under the transposing regulations. ***Regulation 35 of LN 234/2002***
Obligation to supply information for application for permits	N/A	N/A	As above	As above
Obligation to notify the competent authority of any changes in the operation of an installation	N/A .	N/A	As above	As above
Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A	N/A	As above	As above

*ELVs: Emission Limit Values

Table 71.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Malta*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A	N/A	A person shall be guilty of an offence under the regulations if: (a) he fails to comply with any order lawfully given in terms of any provision of the regulations; (b) he contravenes any restriction, prohibition or requirement imposed under the regulations; (c) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of the regulations or to fail to comply with any such provisions, including any order lawfully given in terms of the regulations, or to contravene any restriction, prohibition or requirement imposed by or under the regulations. ***Regulation 12 of LN 349/2010***	Any person who commits an offence against the regulations shall, on conviction, be liable: (a) on a first conviction to a fine (*multa*) of not less than Euros 1,000 but not exceeding Euros 2,000; (b) on a second or subsequent convictions, to a fine (*multa*) of not less than Euros 2,000, but not exceeding Euros 5,000 and/or to imprisonment for a term not exceeding two years. When a person is found guilty of committing an offence under the regulations by means of a vehicle, the owner of the vehicle, where applicable, is held liable in the same manner and degree. Moreover, the Court shall order any person found guilty of committing an offence against the regulations to pay for the expenses incurred by the public entities and/or other persons acting on their behalf involved in the implementation of the regulations and restitution of the environment as a result of the offence, the revocation of the permit issued by the Police and the confiscation of the *corpus delicti*. ***Regulation 13 of LN 349/2010*** Regulation 14 of LN 349/2010 makes certain provisions of the Criminal Code (namely, those relating to the forfeiture

				of the *corpus delicti* and disqualifications in case of convictions) applicable to proceedings in respect of offences under the transposing regulations. ***Regulation 14 of LN 349/2010***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	N/A	N/A	As above	As above

Table 2.72 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Malta*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	A person is guilty of an offence if: (a) he fails to comply with any order lawfully given in terms of any provision of the regulations; (b) he contravenes any restriction, prohibition or requirement imposed by or under the regulations; (c) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of the regulations or to fail to comply with any such provisions, including any order lawfully given in terms of the regulations, or to contravene any restriction, prohibition or requirement imposed by or under the regulations. ***Regulation 18 of LN 172/2010***	Any person who commits an offence against the regulations shall, on conviction, be liable: (a) on a first conviction to a fine (*multa*) of not less than Euros 1,200 but not exceeding Euros 2,300; (b)on a second or subsequent convictions, to a fine (*multa*) of not less than Euros 2,300, but not exceeding Euros 11,600 and/or to imprisonment for a term not exceeding two years. When a person is found guilty of committing an offence under the regulations by means of a vehicle, the owner of the vehicle, where applicable, is held liable in the same manner and degree. Moreover, the Court shall order any person found guilty of committing an offence against the regulations to pay for the expenses incurred by the public entities and, or other persons acting on their behalf involved in the implementation of the regulations and restitution of the environment as a result of the offence, the revocation of

				the permit issued by the competent authority and the confiscation of the *corpus delicti*. Regulation 20 of LN 172/2010 makes certain provisions of the Criminal Code (namely, those relating to the forfeiture of the *corpus delicti* and disqualifications in case of convictions) applicable to proceedings in respect of offences under the transposing regulations. ***Regulation 20 of LN 172/2010***
Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A	N/A	As above	As above

Table 2.73 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Malta*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	Any person shall be guilty of an offence under the regulations if: (a) he fails to comply with any provision of the regulations or fails to comply with permit conditions or with any order lawfully given in terms of any provision of the regulations; (b) he contravenes any restriction, prohibition or requirement imposed by or under the regulations; (c) he acts in contravention of any of the provisions of the regulations; (d) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counseling or procurement to contravene the provisions of the regulations or to fail to comply with any such provisions (including any order lawfully given in terms of the regulations) or to contravene any restriction, prohibition or requirement imposed by or under the regulations. ***Regulation 17 of LN 336/2001***	Any person who commits an offence against the regulations, shall, on conviction, be liable: (a) on a first conviction to a fine (*multa*) of not less than 500 Maltese Liri (Euros 1,165), but not exceeding 1000 Maltese Liri (Euros 2,330); (b) on a second or subsequent convictions, to a fine (*multa*) of not less than 1000 Maltese Liri (Euros 2,330), but not exceeding 2,000 Maltese Liri (Euros 4,660), and/or to imprisonment for a term not exceeding two years. The Court shall order any person found guilty of committing an offence against the regulations to pay for the expenses incurred by the competent authority as a result of the offence, the revocation of the permit issued by the competent authority and the confiscation of the *corpus delicti*, including the vehicle, if applicable. ***Regulation 18 of LN 336/2001*** Regulation 19 of LN 336/2001 makes certain provisions of the Criminal Code (namely, those relating to the forfeiture of the *corpus delicti* and disqualifications in case of convictions) applicable to proceedings in respect of offences under the transposing regulations. ***Regulation 19 of LN 336/2001***
Obligation to supply	N/A	N/A	As above	As above

information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	As above	As above
Obligation to comply with the conditions set in the permits or mandatory ELVs	N/A	N/A	As above	As above

Annex XIX-Poland

POLAND

1. Overview of penalties related to legislation on industrial installations

In Poland, the legal obligations relating to industrial installations are transposed by a variety of legal acts and decrees. The main obligations under each of the four Directives are transposed by the following legislation:

- Environmental Protection Law Act of 27 April 2001 (consolidated text: 2008/25/150 as amended)
- Minister of Environment Regulation of 20 December 2005 on installation emission standards (2005/260/2181 as amended)
- Minister of Environment Regulation of 4 November 2008 on the requirements for measurement of emission and of amount of water taken up (2008/206/1291)

Additional obligations under the Waste Incineration Directive are transposed by the following legislation:

- Waste Act of 27 April 2001 (cons. text: 2010/185/1243),
- Water Law Act of 18 July 2001 (cons. text 2005/239/2019 as amended);
- Building Law Act of 7 July 1994 (cons. text 2006/156/1118),
- Planning and Land Use Act of 27 March 2003 (2003/80/717 as amended);
- Minister of Economy Regulation of 21 March 2002 on requirements for the incineration of waste (2002/37/339 as amended);
- Minister of Environment Regulation of 27 July 2004 on permissible quantities of substances discharged with industrial sewage (2004/180/1867);
- Minister of Environment Regulation of 6 July 2004 on requirements for discharges into water and to soil and on dangerous substances the aquatic environment (2006/137/984 as amended).

The Polish legal system has three different liability systems for non-compliance with environmental requirements: civil,[167] administrative and criminal liability.

Administrative liability applies to breaches of the Environmental Protection Law (EPLA) as well as various sector-specific legislation, such as the Waste Act and the Water Law Act. Administrative liability does not depend on the fault of the perpetrator (ie it is based on strict liability). The following types of sanctions can be imposed as a result of administrative offences: fines, cessation of activities, revocation of the permit for the activity in question and an order to undertake specific action, e.g. to provide for clean-up of the polluted site, to take away waste deposited in a place not intended for this purpose.

There are two main types of administrative fines relevant for this study: so-called "increased fees" applied for using the environment (eg causing emissions) without a required permit and fines imposed for using the environment (eg causing emissions) in breach of the permit conditions. The amount of increased fees depends on the type and amount of substance emitted by the installation without a permit. The system of 'increased fees' for operation of an installation without a permit is based on the system of 'ordinary' environmental fees (fees for legal use of the environment). The 'increased fees' are 500% of ordinary fees. Ordinary fees are calculated according to Council of Ministers Regulation of 14 October 2008 on fees for using the environment (2008/ 196/1217 as amended) which lists specific substances and the fees for emitting a specified amount of those substances (eg 1 kg). For example: the ordinary fee for legal emission of 1 kg of Sulphur Dioxide (SO2) is PLN 0,44 (Euros 0,12); for legal emission of CFC-11, CFC-12 etc is PLN 157,91 (Euros 39,50) etc. (the Regulation lists 67 substances emitted to the air plus substances discharged into water, types of waste disposed on landfills etc.). The amount of fines for emissions into the air in breach of the permit conditions is 1000% of ordinary fees. The amount of fines for discharges into water in breach of the permit

[167] Civil liability is not subject to the current study.

conditions are set in Council of Ministers Regulation of 20 December 2005 on amount of fees for breach of conditions of discharges of waste water into water or into ground (2005/260/2177).

The main administrative and enforcement authorities in Poland are: the Ministry of Environmental Protection, the Environmental Protection Inspectorate, the regulatory authorities which issue environmental permits, (i.e. mainly the Marshall of Voividship or a Starost) and in certain cases connected with nature protection, the regional directorates of environmental protection.

Decisions made by first instance administrative bodies can be appealed to supervisory administrative bodies. Decisions can also be challenged before the regional administrative courts. However, their competence is restricted mainly to legal questions (although the court assesses them against the factual information regarding the case[168]).

Criminal liability for environmental crimes in Poland is specified in the Criminal Code and several other legal acts including the EPLA, the Water Law Act, the Waste Act and the Nature Protection Act. These Acts only provide for liability of natural persons. The Act on the Liability of Collective Entities, adopted in October 2002,[169] addresses the liability of legal persons. However, this Act only provides for sanctions for certain serious environmental offences against the environment.

Criminal liability can be divided into two types: serious offences and petty offences ("misdemeanours"). Serious offences are provided for in the Criminal Code as 'Offences against the environment' (Articles 181-188 of the Criminal Code). Petty offences (misdemeanours) are regulated under sector-specific legal acts and the EPLA.[170] These are complemented by the Petty Offences (Misdemeanour) Code. A petty offence may be deemed to have been committed intentionally or unintentionally, unless a particular provision specifies that only intention is required. Petty offences are punishable with imprisonment, restriction of freedom (connected with an obligation to carry out public works[171]) or a fine of up to 1,250 Euros.[172] Penalties imposed for petty offences are recorded as criminal penalties.[173]

In Poland, the different forms of legal liability may be imposed simultaneously.

For general environmental offences, Article 182 of the Criminal Code applies where there is any processing of air pollution that could cause serious environmental pollution. This could apply to IPPC Directive and all other directives concerning emissions. However, it is important to note that this provision only applies to situations where there is a threat of damage to the environment. For example, where emission limits in the permit have been exceeded, such a breach would not necessarily be sufficient to apply to this sanction.

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[168] Schmidt C., Chapter 38 – Poland, in *The international comparative legal guide to: Environmental Law 2010 – A practical cross-border insight into environment law*, Global Legal Group, London, 2010. Available at: http://www.iclg.co.uk/index.php?area=4&country_results=1&kh_publications_id=141&chapters_id=3624

[169] Schmidt C., Chapter 38 – Poland, in *The international comparative legal guide to: Environmental Law 2010 – A practical cross-border insight into environment law*, Global Legal Group, London, 2010. Available at: http://www.iclg.co.uk/index.php?area=4&country_results=1&kh_publications_id=141&chapters_id=3624

[170] List of sector specific legislations (other than the Environmental Protection Act- Articles 329-361) which regulate the petty offences: Waste Act (Articles 70-79), and Water Act (Article 192-195).

[171] E.g. cleaning streets, simple works in hospitals or charity organisation etc.

[172] Study on Criminal Penalties in a Few Candidate Countries' Environmental Law http://ec.Eurosopa.eu/environment/legal/crime/pdf/criminal_pen_vol1.pdf

[173] Jendrośka Jerzmański Bar & Partners. Environmental Lawyers. Environmental Management and Law Association (EMLA), Milieu Ltd., *Study on measures other than criminal ones in cases where environmental Community law has not been respected in a few candidate countries*, for the Eurosopean Commission (DG Environment), Contract no. B4-3040/2003/369100/MAR/A.3, 30 September 2004. Available at : http://ec.Eurosopa.eu/environment/legal/crime/pdf/cd_summary_report.pdf

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Poland

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Poland
IPPC Directive	
Catch-all	-
4	X
5	X
6	-[174]
12 (1)	-
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	-
3(2)	X
4	-
5 (2)(a)	-
5 (2)(b)	-
5 (4)	-
5 (5)	-
5 (6)	-
5 (8)	-
5 (9)	-
5 (10)	-
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (4)	-
5	X
7 (1)	X
9	X

[174] There is no sanction . However, if the permit application fails to contain all the required information, the authority will refuse the permit.

10	X
13	X
WI Directive	
Catch-all	X[175]
4 (1)	X
4 (2)	-[176]
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	-
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Poland. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

[175] Article 48 of the Waste Act is quite broad and concerns 'incorrect fulfilling of obligations by an operator of a waste incineration' which encompasses many but not all situations when operator violates environmental law

[176] There is no sanction but in case the permit application fails to contain all the required information, the authority will refuse the permit

Table 2.74 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Poland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an IPPC installation without an integrated environmental permit. ***Article 365 EPLA*** Operating any installation (including IPPC installations) without a required permit (including an integrated environmental permit). ***Article 292 EPLA***	Cessation of the operation of the installation. ***Article 365 EPLA*** Fine (please refer to introduction for calculation of fines). ***Article 292 EPLA***	Operating without an environmental permit. ***Article 351.1 EPLA*** ***(Article 351.1 covers both the operation without a permit and operation in breach of the permit conditions)***	Imprisonment (from 5 up to 30 days); 1 month Restriction of freedom (restriction of movement) and an obligation to carry out public works ; or A fine from 20 PLN to 5000 PLN. (about Euros 5 to 1,250). ***Article 351.1 EPLA***
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an	N/A	N/A	N/A	N/A

installation				
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the emission limits set in the integrated environmental permit. ***Article 367.1 EPLA*** Obligation to comply with the conditions of the environmental permit during the operation of an installation. ***Art 195.1.1 EPLA*** Obligation to comply with the environmental permit during the operation of an installation. ***Article 298 EPLA***	Cessation of the operation of the installation. ***Article 367.1 EPLA*** Withdrawal of the permit. ***Article 195.1.1 EPLA*** A fine (please refer to introduction for calculation of fines). ***Article 298 EPLA***	Failure to comply with the conditions set in the integrated environmental permit. ***Article 351.1 EPLA*** ***(Article 351.1 covers both the operation without a permit and operation in breach of the permit conditions)*** Violation of the provisions on the monitoring obligation. ***Article 340 and 341 EPLA***	Imprisonment (5 up to 30 days); 1 month Restriction of freedom (restriction of movement) and an obligation to carry out public works; or A fine of Euros 5 to Euros 1,250[177] (from 20 PLN to 5,000 PLN). ***Article 351.1 EPLA*** A fine of up to Euros 1,250. ***Article 340 and 341, EPLA***

*ELVs: Emission Limit Values

[177] Converted using exchange rates of 16 November 2010.

Table 75.2 *Directive 1999/13/EC (VOC Directive[178]): types of offences and related administrative and criminal penalties in Poland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to comply with the emission limits set in the integrated environmental permit. ***Article 367.1 EPLA*** Operating any installation (including VOC installations) without a required permit (including an integrated environmental permit). ***Article 292 EPLA***	Cessation of the operation of the installation . ***Article 367.1 EPLA*** A fine (please refer to introduction for calculation of fines). ***Article 292 EPLA***	Operating without an environmental permit. ***Article 351.1 EPLA*** ***(Article 351.1 covers both the operation without a permit and operation in breach of the permit conditions)*** Failure to provide the competent authority with required notification. ***Art 342 EPLA***	Imprisonment (from 5 up to 30 days); 1 month Restriction of freedom (restriction of movement) and an obligation to carry out public works; and A fine of Euros 5 to Euros 1,250.[179] (from PLN 20 to PLN 5,000). ***Article 351.1 and 342 EPLA***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the emission limits set in the integrated environmental permit. ***Article 367.1 EPLA*** Obligation to comply with the conditions of the environmental permit	Cessation of the operation of the installation. ***Article 367.1 EPLA*** Withdrawal of the permit. ***Article 195.1.1 EPLA***	Violation of the provisions on the emission standards or failure to comply with the requirements relating to the correct operation of an installation. ***Article 339 EPLA*** Failure to comply with the conditions	A fine of up to Euros 1,250. ***Article 339 EPLA;*** Imprisonment (5 up to 30 days) Restriction of freedom (restriction of movement) and an obligation to carry out public works; or A fine of Euros 5 to Euros 1,250[180]

[178] http://ec.Eurosopa.eu/environment/legal/crime/pdf/criminal_pen_vol2.pdf. List of transposing laws used as resource for filling in the table: Regulation of the Minister of Environment of 20 November 2001 on types of installations the emissions wherefrom do not require a permit and the operation whereof requires notification, Act of 27 April on Environmental Protection, Criminal Code.

[179] Converted using exchange rates of 16 November 2010.

	during the operation of an installation. ***Article 195.1.1 EPLA*** Obligation to comply with the environmental permit during the operation of an installation. ***Article 298 EPLA***	 A fine (please refer to introduction for calculation of fines). ***Article 298 EPLA***	set in the environmental permit. ***Article 351.1 EPLA*** Violation of the provisions on the monitoring obligation. ***Article 340 and 341 EPLA***	(from PLN 20 to PLN 5,000). ***Article 351.1 EPLA*** Fine of up to Euros 1,250. ***Article 340 and 341 EPLA***

[180] Converted using exchange rates of 16 November 2010.

Table 2.76 *Directive 2001/80/EC (LCP Directive)[181]: types of offences and related administrative and criminal penalties in Poland*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the emission limits set in the integrated environmental permit. ***Article 367.1 EPLA*** Obligation to comply with the conditions of the environmental permit during the operation of an installation. ***Article 195.1.1 EPLA*** Obligation to comply with the environmental permit during the operation of an installation. ***Article 298 EPLA***	Cessation of the operation of the installation . ***Article 367.1 EPLA*** Withdrawal of the permit ***Article 195.1.1 EPLA*** A fine (please refer to introduction for calculation of fines). ***Article 298 EPLA***	Failure to comply with the conditions set in the environmental permit. ***Article 351.1 EPLA*** ***(Article 351.1 covers both the operation without a permit and operation in breach of the permit conditions)***	Imprisonment (from 5 up to 30 days); Restriction of freedom (prohibition of movement) connected with obligation to carry out public works; or A fine of Euros 25 to Euros 182,907.[182] (from PLN 100 to PLN 720, 000) ***Article 351.1 EPLA***

Table 2.77 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Poland*

[181] http://ec.Eurosopa.eu/environment/legal/crime/pdf/criminal_pen_vol2.pdf List of transposing laws used for filling in the table: Regulation of the Minister of the Environment of 30 July 2001 on emission of polluting substances into the air from technological process and operations, Act of 27 April 2001 on Environmental Protection, Criminal Code, Act of 7 July 1994 - Building Law.
[182] Converted using exchange rates of 16 November 2010

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirements: Obligation to comply with the emission limits set in the integrated environmental permit. ***Article 367.1 EPLA*** Operating any installation (including IPPC installations) without a required permit (including an integrated environmental permit). ***Article 292 EPLA*** Operation of an waste incinerator without a required permit (or in breach of its conditions). ***Article 79b.2.5 Waste Act***	Cessation of the operation of the installation. ***Article 367.1 EPLA*** A fine (please refer to introduction for calculation of fines). ***Article 292 EPLA*** A fine: PLN 10,000 = about Euros 2,500. ***Article 79b Waste Act***	Operating without environmental permit. *Article 351.1 EPLA* *(Article 351.1 covers both the operation without a permit and operation in breach of the permit conditions)*	Imprisonment (5 up to 30 days); Restriction of freedom (prohibition of moving) connected with obligation of carrying out public works; or A fine of Euros 25 to Euros 182,907 (from PLN 100 to PLN 720, 000). ***Article 351.1 EPLA***
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the emission limits set in the integrated environmental permit. ***Article 367.1 EPLA*** Obligation to comply with the	Cessation of the operation of the installation. ***Article 367.1 EPLA and Article 48 Waste Act*** A fine: (please refer to introduction for	Failure to comply with the conditions set in the environmental permit. ***Article 351.1 EPLA*** ***(Article 351.1 covers both the operation without a permit and operation in breach of the permit conditions)***	Imprisonment (5 up to 30 days); Restriction of freedom (prohibition of movement) connected with obligation to carry out public works; or A fine from Euros 5 to Euros 1,250[183] (from PLN 20 to PLN 5,000).

	environmental permit during the operation of an installation. ***Article 298 EPLA*** Obligation to comply with conditions set by law regarding operation of waste incinerators. ***Article 48 Waste Act*** Operation of a waste incinerator in breach of a permit conditions (or without a required permit). ***Article 79b.2.5 Waste Act***	calculation of fines). ***Article 298 EPLA*** A fine: PLN 10,000 = about Euros 2,500 . ***Article 79b Waste Act***		***Article 351 EPLA***

Annex XX-Portugal

PORTUGAL

1. Overview of penalties related to legislation on industrial installations

The Portuguese Law on the Environment (Law 11/87 of 7 April 1987 as amended by Law 13/2002 of 19 February 2002) provides the legal framework on environmental matters. Other more specific laws have, however, been enacted to transpose specific EU Directives, and it is these that provide the enforceable provisions related to the four obligations concerning industrial installations. The relevant laws are as follows:

- IPPC Directive: DL 173/2008[184]
- VOC Directive: DL 242/2001[185] as amended
- LCP Directive: DL 178/2003[186]
- WI Directive: DL 85/2005[187] as amended

Administrative sanctions are more commonplace than criminal sanctions and apply in all circumstances for the purposes of this report. Compliance authorities such as the Portuguese Environmental Agency *(Agência Portuguesa do Ambiente and* the General Inspectorate for Environment and Planning *(Inspecção Geral do Ambiente e Ordenamento do Território)* – file administrative offence procedures that can result in pecuniary fines and accessory sanctions. The type and number of accessory sanctions has increased substantially pursuant to Law 89/2009 which amends the legal framework of environmental offences adopted under Law 50/2006.

The General Administrative Offences Regime (approved by Law Decree 433/82 and last amended by Law 109/2001) sets out a simplified procedure, based on "an illegal fact that results in the application of a fine" which is within the competence of administrative bodies with the aim of preserving public objectives and interests. It gives rise to the application of fines or accessory sanctions, which are administrative enforcement measures applied by administrative authorities. A special regime of Administrative Offences, approved by Law 50/2006 and amended by Law 89/2009, has been established for violations of environmental laws and regulations. According to this regime, penalties are set in accordance with the type of the offence, the agent (natural or legal person) and the degree of fault (Article 22 (2).

With the exception of DL 178/2003 (LCP Directive), which contains a special administrative offences regime, all the other transposing legislation refers expressly to the general environmental administrative offences regime:

- Article 32 of DL 173/2008 (IPPC Directive) classifies the type of offence "in accordance with Law 50/2006", and defines the accessory sanctions in accordance with the same regime (Article 33);

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[184] Law Decree 173/2008, of 26 August, which establishes the legal regime governing integrated pollution prevention and control, transposing into national law Directive no. 2008/1/EC of the European Parliament and of the Council, of 15 January http://dre.pt/pdf1sdip/2008/08/16400/0596705980.pdf

[185] Law Decree 242/2001 which transposes into national law Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents incertain activities and installations http://dre.pt/pdf1sdip/2001/08/202A00/55945611.pdf as amended by DL 181/2006 (which revokes its Article 21 (5) http://dre.pt/pdf1sdip/2006/09/17200/65786583.pdf and by DL 98/2010 (which amends its Articles 2, 7, 17, 18 and 19) on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations http://dre.pt/pdf1sdip/2010/08/15500/0335303398.pdf

[186] Law Decree 178/2003 which transposes into national law Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants http://dre.pt/pdf1sdip/2003/08/179A00/46264638.pdf

[187] Law Decree 85/2005 which transposes into national law Directive 2000/76/EC on incineration of waste http://dre.pt/pdf1sdip/2005/04/082A00/32143235.pdf as amended by DL 178/2006 (which amends Articles 5, 6, 7, 9 and 17) http://dre.pt/pdf1sdip/2006/09/17100/65266545.pdf and by DL 92/2010 (which amends Articles 6, 7, 8, 9, 10,13,14,15,18, 41, 42 and 44) http://dre.pt/pdf1sdip/2010/07/14300/0282502842.pdf

- Article 15 of DL 242/2001 (VOC Directive), as last amended by DL 98/10, classifies the type of offence "in accordance with Law 50/2006", and defines the accessory sanctions in accordance with the same regime (Article 16);
- Article 24 of DL 85/2005 (WI Directive), as last amended by DL 92/10, classifies the type of offence "in accordance with Law 50/2006", and defines the accessory sanctions in accordance with the same regime (Article 25);

However, these penalties do not exclude the possibility of administrative, criminal and/or civil liability being applied in conjunction. In fact, Law 50/2006 as amended by Law 89/2009 expressly foresees under its Article 28 (1) that "when the same fact constitutes simultaneously an administrative offence and a crime the offender is liable for both". It further clarifies under Article 28 (2) that "the administrative decision to apply a penalty shall prescribe if the offender is condemned in criminal procedure for the same fact".

Accessory sanctions may also apply, as specified under Article 28 (3). The amount of the penalties and the type of accessory sanctions are determined in accordance with the seriousness of the offence, the agent's degree of fault and his/her economic situation as well as the benefits the agent has obtained from violating the law (Article 20 of Law 50/2006 as amended by Law 89/2009).

Each piece of Portuguese legislation concerning industrial installations contains administrative enforcement provisions that differentiate between legal and natural persons and the amount of the penalties vary in accordance with the degree of fault. Higher fines apply for legal persons. With regard to administrative penalties, the IPPC, VOC and WI Laws refer to Law 50/2006 of 29 August 2006 establishing a framework of environmental offences[188]. Across the specific Portuguese legislation assessed below, the fines are as follows: For natural persons: between Euros 500-3,750 and Euros 200-375,000 pursuant to Law 50/2006 (as amended by Law 86/2009); and for legal persons: Euros 2,500-45,000 and Euros 3,000-2,500,000 under Law 50/2006 (as amended by Law 86/2009).

The Portuguese Penal Code includes different categories of environmental crimes. Relevant for this report, Articles 279 and 280 of the Code provide for criminal liability which includes air pollution from industrial installations. In case of fault, Article 279 establishes a penalty of 3 years maximum imprisonment and a fine of 600 days which, in accordance with Article 280, can be increased to 8 years whenever such pollution represents a danger to life, physical integrity or assets of others as well as to high value historical or cultural monuments.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Portugal

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always

[188] Law 50/2006 of August 29 establishing a framework of environmental offences and amended by Law 89/2009 – consolidated version: http://dre.pt/pdf1sdip/2009/08/16800/0570905722.pdf

systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Portugal
IPPC Directive	
Catch-all	X
4	X
5	X[189]
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	-
VOC Directive	
Catch-all	-
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	-
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X

[189] An interim regime is established under Art. 36 of DL 173/2008 for existing installations which shall have permits in accordance with the IPPC Directive by the date of entry into force of the national law (28 August 2008).

13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Portugal. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.78 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Portugal*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Very serious environmental offence: Operation of an installation without the required environmental permit. ***Article 32(1)(a) of DL 173/2008*** Where it is justified (according to the seriousness of the offence), the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006. ***Article 33(1) of DL 173/2008***	**Fines:** Individuals (natural persons): Euros 20,000 to Euros 30,000 in case of negligence Euros 30,000 to Euros 37,500 in case of fault Legal persons: Euros 38,500 to Euros 70,000 in case of negligence; Euros 200,000 to Euros 2,500,000 in case of fault. ***L 50/2006*** ***Article 22(4) as amended by Law 89/2009*** **Accessory sanctions:** With regard to serious and very serious environmental offences the following accessory sanctions may apply: ***Article 33(1) of DL 173/2008*** a) Confiscation by the State of the assets belonging to the offender and used to practice the offence; b) Prohibition of performing the profession or activities the exercise of which depend on holding public title or from authorisation or approval by public authority; c) Suspension of the right to obtain	N/A	N/A

		subsidies or other benefits issued by national or European public authorities or services; d) Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities; e) Suspension of the right to participate in public auctions or tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits; f) Closure of the installation which is subject to authorisation or license from the administrative authority; g) Termination or suspension of licenses, permits or authorisations related to the exercise of the respective activity; h) Loss of tax benefits, credit benefits and credit financing acquired prior to the offence; i) Sealing of working equipment (ie closing off the equipment so that no work can be performed); j) Application of measures that might be appropriate to the prevention of		

		environmental damage, restoration of the situation prior to the offence and minimisation of the effects derived from it; l) Making public the sentence. ***Article 30 of Law 50/2006 as amended by Law 89/2009***		
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Serious environmental offence: <u>Infringement or non-compliance with the following requirement:</u> Obligation to report any modifications in the installation. ***Article 32 (2) (c) of DL 173/2008*** Where it is justified (according to the seriousness of the offence), the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006. ***Article 33(1) of DL 173/2008***	**Fines:** <u>Individuals: (natural persons):</u> Euros 2,000 to Euros 10,000 in case of negligence Euros 6,000 to Euros 20,000 in case of fault <u>Legal persons</u>: Euros 15,000 to Euros 30,000 in case of negligence Euros 30,000 to Euros 48,000 in case of fault. ***L 50/2006*** ***Article 22(3) as amended by Law 89/2009*** **Accessory sanctions:** With regard to serious and very serious environmental offences the following accessory sanctions may apply: ***Article 33(1) of DL 173/2008*** a) Confiscation by the State of the assets belonging to the offender and used to practice the offence; b) Prohibition of performing the	N/A	N/A

		profession or activities the exercise of which depend on holding public title or from authorisation or approval by public authority; c) Suspension of the right to obtain subsidies or other benefits issued by national or European public authorities or services; d) Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities; e) Suspension of the right to participate in public auctions or tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits; f) Closure of the installation which is subject to authorisation or license from the administrative authority; g) Termination or suspension of licenses, permits or authorisations related to the exercise of the respective activity; h) Loss of tax benefits, credit benefits and credit financing lines acquired prior to the offence;		

		i) Sealing of working equipment (ie closing off the equipment so that no work can be performed); j) Application of measures that might be appropriate to the prevention of environmental damage, restoration of the situation prior to the offence and minimisation of the effects derived from it; l) Making public the sentence. ***Article 30 of Law 50/2006 as amended by Law 89/2009***		
Obligation to comply with the conditions set in the permit or mandatory ELVs	Serious environmental offence <u>Infringement or non-compliance with the following requirement:</u> Obligation to comply with the conditions imposed by the licence. ***Article 32 (2) (b) of DL 173/2008*** Where it is justified (according to the seriousness of the offence), the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006.	**Fines:** <u>Individuals: (natural persons):</u> Euros 2,000 to Euros 10,000 in case of negligence Euros 6,000 to Euros 20,000 in case of fault. <u>Legal persons:</u> Euros 15,000 to Euros 30,000 in case of negligence Euros 30,000 to Euros 48,000 in case of fault. ***L 50/2006*** ***Article 22(3) as amended by Law 89/2009*** **Accessory sanctions:** With regard to serious and very serious environmental offences the following accessory sanctions may apply: ***Article 33(1) of DL 173/2008*** a) Confiscation by the State of the	N/A	N/A

	Article 33(1) of DL 173/2008	assets belonging to the offender and used to practice the offence; b) Prohibition of performing the profession or activities the exercise of which depend on holding public title or from authorisation or approval by public authority; c) Suspension of the right to obtain subsidies or other benefits issued by national or European public authorities or services; d) Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities; e) Suspension of the right to participate in public auctions or tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits; f) Closure of the installation which is subject to authorisation or license from the administrative authority; g) Termination or suspension of licenses, permits or authorisations related to the exercise of the respective activity;		

		h) Loss of tax benefits, credit benefits and credit financing lines acquired prior to the offence ; i) Sealing of working equipment; (ie closing off the equipment so that no work can be performed); j) Application of measures that might be appropriate to the prevention of environmental damage, restoration of the situation prior to the offence and minimisation of the effects derived from it; l) Making public the sentence. ***Article 30 of Law 50/2006 as amended by Law 89/2009***		

*ELVs: Emission Limit Values

Table 79.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Portugal*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A[190]	N/A	N/A	N/A
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Serious environmental offence : Infringement or non-compliance with the following requirement: Obligation to notify the competent authority of non-compliance with the provisions of national law. ***Article 17 of DL 242/2001 as amended by DL 98/2010***	**Fines:** Individuals: (natural persons): Euros 2,000 to Euros 10,000 in case of negligence Euros 6,000 to Euros 20,000 in case of fault. Legal persons: Euros 15,000 to Euros 30,000 in case of negligence Euros 30,000 to Euros 48,000 in case of fault. ***L 50/2006***	N/A	N/A

[190] According to Article 17 (a) of DL 242/2001 violation of the obligation to apply for an authorisation for new installations as foreseen under Article 5 was considered a serious environmental offence.
This provision has however been amended by DL 98/2010 and is no longer an offence

	Where it is justified (according to the seriousness of the offence), the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006. Article 18 of DL 242/2001 as amended by DL 98/2010	***Article 22(3) as amended by Law 89/2009*** **Accessory sanctions:** For serious environmental offences together with the fine the competent authority my determine the application of an accessory sanction in accordance with Law 50/2006. ***Article 18 (1) of DL 242/2001 as amended by DL 98/2010*** **Accessory sanctions:** For serious and light environmental offences the competent authority my also determine the provisional seizure of the goods and documents in accordance with Art. 42 of Law 50/2006, which determines the conditions for the provisional seizure. ***Article 18 (2) of DL 242/2001 as amended by DL 98/2010***		

Table 2.80 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Portugal*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirement: Obligation to notify the competent authority of any changes in the operation of the installation. ***Article 19 (h) of DL 178/2003***	**Fines:** Individuals (natural persons): Euros 500 to Euros 3,740 Legal persons: Euros 2,500 to Euros 44,891. ***Article 19 of DL 178/2003*** **Accessory sanctions:** Depending on the seriousness of the offence and the degree of fault the following accessory sanctions may be applied together with the fines: a) Suspension of the right to obtain subsidies or other benefits issued by public authorities or services; b) Suspension of the right to participate in public tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits. ***Article 20 of DL 178/2003***	N/A	N/A

Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to respect the emission limit values set in the permit of the installation. ***Article 19(a), (d) and (e) of DL 178/2003***	**Fines:** Individuals: (natural persons): Euros 500 to Euros 3,740 Legal persons: Euros 2,500 to Euros 44,891. ***Article 19 of DL 178/2003*** **Accessory sanctions:** Depending on the seriousness of the offence and the degree of fault the following accessory sanctions may be applied together with the penalties: a) Suspension of the right to obtain subsidies or other benefits issued by public authorities or services; b) Suspension of the right to participate in public tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits. ***Article 20 of DL 178/2003***	N/A	N/A

Table 2.81 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Portugal*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Very serious environmental offence: The entry into operation of an incineration or co-incineration of waste without a license. ***Article 41 (1) (a) of DL 85/2005 as amended by DL 92/2010***	**Fines:** <u>Individuals (natural persons):</u> Euros 20,000 to Euros 30,000 in case of negligence Euros 30,000 to Euros 37,500 in case of fault <u>Legal persons:</u> Euros 38,500 to Euros 70,000 in case of negligence Euros 200,000 to Euros 2,500,000 in case of fault. ***Article 41 (1) of DL 85/2005 as amended by DL 92/2010 and L 50/2006*** ***Article 22(4) as amended by Law 89/2009***	N/A	N/A
	Where it is justified (according to the seriousness of the offence), the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006. ***Article 42 of DL 85/2005 as amended by DL 92/2010***	**Accessory sanctions:** Depending on the seriousness of the offence the competent authority may together with the fine apply the accessory sanctions that may be needed in accordance with Law 50/2006 as amended by Law 89/2009 ***Article 42 of DL 85/2005 as amended by DL 92/2010*** With regard to serious and very serious environmental offences the following accessory sanctions may apply: a) Confiscation by the State of the assets belonging to the offender and used to practice the offence;		

		b) Prohibition of performing the profession or activities the exercise of which depend on holding public title or from authorisation or approval by public authority; c) Suspension of the right to obtain subsidies or other benefits issued by national or European public authorities or services; d) Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities; e) Suspension of the right to participate in public auctions or tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits; f) Closure of the installation which is subject to authorisation or license from the administrative authority; g) Termination or suspension of licenses, permits or authorisations related to the exercise of the respective activity; h) Loss of tax benefits, credit benefits and credit financing lines acquired prior		

		to the offence ; i) Sealing of working equipment (ie closing off the equipment so that no work can be performed); j) Application of measures that might be appropriate to the prevention of environmental damage, restoration of the situation prior to the offence and minimisation of the effects derived from it; l) Making public the sentence. ***Article 30 of Law 50/2006 as amended by Law 89/2009***		
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to supply information for application for permits foreseen under Article 7 (3) of DL 85/2005 is not considered an offence under DL 85/2005 as amended by DL 92/2010.	No penalties	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Serious environmental offence: Infringement or non-compliance with the following requirement: Obligation to notify the competent authority of any changes in the operation of the installation. ***Article 41 (2) b) of DL 85/2005 as amended by DL 92/2010***	**Fines:** Individuals (natural persons): Euros 2,000 to Euros 10,000 in case of negligence Euros 6,000 to 20,000 in case of fault Legal persons: Euros 15,000 to Euros 30,000 in case of negligence Euros 30,000 to Euros 48,000 in case of fault. ***Article 41 (1) of DL 85/2005 as amended by DL 92/2010 and L 50/2006*** ***Article 22(4) as amended by Law 89/2009***	N/A	N/A

	Where it is justified (according to the seriousness of the offence), the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006. ***Article 42 of DL 85/2005 as amended by DL 92/2010***	**Accessory sanctions:** Depending on the seriousness of the offence the competent authority may together with the fine apply the accessory sanctions that may be needed in accordance with Law 50/2006 as amended by Law 89/2009 ***Article 42 of DL 85/2005 as amended by DL 92/2010*** With regard to serious and very serious environmental offences the following accessory sanctions may apply: a) Confiscation by the State of the assets belonging to the offender and used to practice the offence; b) Prohibition of performing the profession or activities the exercise of which depend on holding public title or from authorisation or approval by public authority; c) Suspension of the right to obtain subsidies or other benefits issued by national or European public authorities or services; d) Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities; e) Suspension of the right to participate in public auctions or tenders which		

		have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits; f) Closure of the installation which is subject to authorisation or license from the administrative authority; g) Termination or suspension of licenses, permits or authorisations related to the exercise of the respective activity; h) Loss of tax benefits, credit benefits and credit financing lines acquired prior to the offence; i) Sealing of working equipment (ie closing off the equipment so that no work can be performed); j) Application of measures that might be appropriate to the prevention of environmental damage, restoration of the situation prior to the offence and minimisation of the effects derived from it; l) Making public the sentence. ***Article 30 of Law 50/2006 as amended by Law 89/2009***		
Obligation to comply with the conditions set in the permits or mandatory ELVs	Very serious environmental offence: Infringement or non-compliance with the following requirement: Obligation to comply with the	**Fines:** Individuals (natural persons):: Euros 20,000 to Euros 30,000 in case of negligence	N/A	N/A

	conditions set in the permits or mandatory emission limit values. ***Article 41(1) (n), (o), (u), (v) of DL 85/2005 as amended by DL 92/2010***	Euros 30,000 to Euros 37,500 in case of fault <u>Legal persons:</u> Euros 38,500 to Euros 70,000 in case of negligence Euros 200,000 to Euros 2,500,000 in case of fault. ***Article 41 (1) of DL 85/2005 as amended by DL 92/2010 and L 50/2006*** ***Article 22(4) as amended by Law 89/2009***		
	Whenever the seriousness of the offence justifies the competent authority may apply, together with the penalty, the accessory sanctions that it deems appropriate in accordance with Law 50/2006. ***Article 42 of DL 85/2005 as amended by DL 92/2010***	**Accessory sanctions:** Depending on the seriousness of the offence the competent authority may together with the fine apply the accessory sanctions that may be needed in accordance with Law 50/2006 as amended by Law 89/2009 ***Article 42 of DL 85/2005 as amended by DL 92/2010*** With regard to serious and very serious environmental offences the following accessory sanctions may apply: a) Confiscation by the State of the assets belonging to the offender and used to practice the offence; b) Prohibition of performing the profession or activities the exercise of which depend on holding public title or from authorisation or approval by public authority;		

		c) Suspension of the right to obtain subsidies or other benefits issued by national or European public authorities or services; d) Suspension of the right to participate in national and international conferences, exhibitions or markets with the aim of selling or marketing the products or activities; e) Suspension of the right to participate in public auctions or tenders which have as their object the contract or award of public works, procurement of goods and services, the provision of public services and the issuing of licenses or permits; f) Closure of the installation which is subject to authorisation or license from the administrative authority; g) Termination or suspension of licenses, permits or authorisations related to the exercise of the respective activity; h) Loss of tax benefits, credit benefits and credit financing lines acquired prior to the offence; i) Sealing of working equipment (ie closing off the equipment so that no work can be performed); j) Application of measures that might be appropriate to the prevention of		

		environmental damage, restoration of the situation prior to the offence and minimisation of the effects derived from it; l) Making public the sentence. ***Article 30 of Law 50/2006 as amended by Law 89/2009***		

Annex XXI-Romania

ROMANIA

1. Overview of penalties related to legislation on industrial installations

The Romanian legal system is based upon the continental system of codification. The primary environmental legislation relating to industrial installations is the Government Emergency Ordinance No. 195/2005 on environmental protection, as amended[191](GEO No. 195/2005). GEO No. 195/2005 sets out the general principles and main obligations regarding the impact of social and economic activities on the environment, including environmental authorizations, approvals and permits. The more specific legislative provisions relating to each of the four Directives are as follows:

The IPPC Directive is transposed into Romanian legislation by Government Emergency Ordinance No. 152/2005 on integrated pollution prevention and control, as amended and completed by approval Law No. 84/2006 and by Government Emergency Ordinance No. 40/2010, as approved by Law No. 205/2010 (GEO No. 152/2005).

The VOC Directive is transposed through the Government Decision No. 699/2003 determining certain steps deemed to reduce the emissions of Volatile Organic Compounds due to the use of organic solvents in certain activities and installations, as amended by Government Decision No. 1902/2004, Government Decision No. 735/2006, Government Decision No. 1339/2006 and Government Decision No. 371/2010 (GD No. 699/2003).

The Government Decision No. 440/2010 establishing certain measures to limit the release into the atmosphere of certain pollutants originating in large combustion plants (GD No. 440/2010) transposes the LCP Directive.

The WI Directive is transposed by the Government Decision No. 128/2002 on the incineration of wastes, as amended by Government Decision No. 268/2005 and Government Decision No. 427/2010 (GD No. 128/2002).

Generally, a breach of the above legislation may involve administrative and/or criminal sanctions.

Contraventions (similar to misdemeanours in some common law countries) represent administrative offences expressly regulated and sanctioned by legislation. The framework regulation on contraventions is Government Ordinance no. 2/2001 on the legal regime of contraventions, as amended and completed.

Administrative sanctions may be imposed by the authority in case of contraventions provided by the above legislation on industrial installations on the operator (legal person), as well as on the legal representatives/employees of the operator and include administrative fines of up to approximately Euros 23,000. GEO No. 195/2005 also provides the possibility of taking the measure of suspension of the environmental permit or authorisation (for a maximum of six months) or cancellation of the environmental permit and termination of the project/activity.

In Romania, a number of different competent authorities are responsible for coordinating and monitoring the implementation of the legislation relating to industrial installations. The National Environmental Protection Agency and its territorial departments (the Regional Environmental Protection Agencies and the Counties Environmental Protection Agencies), have responsibilities for implementing the legislation in the area of integrated pollution prevention and control. In addition, the

[191] Amended by: Law no. 265/2006, Government Emergency Ordinance no. 57/2007, Government Emergency Ordinance no. 114/2007, Government Emergency Ordinance no. 164/2008.

National Environmental Guard and its territorial departments, the Regional and Counties Environmental Guards, have responsibilities for acknowledging breaches of legislation and imposing sanctions.

Administrative offences (contraventions) are different from criminal offences in terms of regulation sources (e.g. criminal offences may not be introduced in legislation by Government decisions), effective penalties, enforcement authorities (e.g. the National Environmental Guard may apply only administrative fines, in case evidences of criminal offences are discovered it can only inform thereon the police and/or the competent public prosecutor), procedural rights, court proceedings etc.

Criminal liability is a stricter form of legal liability that the administrative one. Under the Criminal Code (the framework regulation on criminal liability), both individual persons and legal persons (for criminal offences undertaken in the name or in the interest of legal persons) may be subject to criminal liability and to criminal sanctions.

Failure to comply with some requirements of the above special legislation on industrial installations may also constitute a criminal offence punishable with a criminal fine of up to approximately Euros 23,000 or imprisonment of up to three years.

There are cases where administrative and criminal sanctions are complementary. Thus, failure of the operator to comply with the requirements mentioned in the integrated environmental permit can be sanctioned, besides the administrative fines, with the suspension of the environmental permit (administrative sanction). Pursuing the activity after the suspension of the permit, provided that such continuation may endanger human, animal or plant life or health, represents a criminal offence and can be sanctioned with prison from 6 months to 3 years or criminal fine from 50,000 to 100,000 RON (Euros 11,590 to 23,182) under Art. 98 (2) 6 of GEO No. 195/2005.

Finally, administrative and penal sanctions apply to both natural and legal persons. As a rule, the sanctions are more stringent for legal than natural persons.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Romania

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision, which imposes criminal sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Romania
IPPC Directive	
Catch-all	
4	X
5	X
6	-
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	
3(2)	-
4(4)	-
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	
4 (1)	X
4 (2)	X
4 (3)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	-
13	X
WI Directive	
Catch-all	
4 (1)	X
4 (2)	-
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	-
8 (4)	-
8 (5)	-
8 (7)	-
9	-
10 (1)	X
10 (2)	-
11	X
12 (2)	X
13 (2)	-
13 (3)	-
13 (4)	-

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Romania. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.82 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Romania*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating an installation without integrated environmental permit (obligation specified in Article 7 and 8) ***Art 36(1)(a) GEO No. 152/ 2005***	A fine of 50,000 to 100,000 RON (Euros 11,590 to 23,182) ***Art. 36(1) of GEO No. 152/2005***[192]	N/A	N/A
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation of the operator to draft an action plan (as specified at Art 19), in the process of obtaining the integrated environment permit for existing installations[193] ***Art 36(1)(b) of GEO No. 152/ 2005***	A fine of 50,000 to 100,000 RON (Euros 11,590 to 23,182) ***Art. 36(1) of GEO No. 152/2005***	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out any change in the operation and any substantial change intended to be performed on the installation (as specified in Article 26 (1)) without notifying the competent authorities. ***Art. 36(1)(d) of GEO No. 152/ 2005*** Infringement or non-compliance with the following requirement: Obligation of the operator to comply with the obligation of not carrying on activities resulting from changes that are under an obligation of notification until the adoption of a decision by the competent authority (as specified at	A fine of 50,000 to 100,000 RON (Euros 11,590 to 23,182). ***Art. 36(1) of GEO No. 152/2005*** Suspension of the permit in the conditions of Government Emergency Ordinance No. 195/2005 on environment protection. ***Art. 36(2) of GEO No. 152/2005*** A fine of 7,500 to 15,000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100,000 RON (Euros 11,590 to 23,182) for legal persons. ***Art. 96 (3) of GEO No. 195/2005***	N/A	N/A

[192] Conversions are based on the Romanian central bank official exchange rate as of Friday 26 November 2010, 1 EUR = 4.3137 RON

[193] This sanction applies only in regard to the process of obtaining the permit for existing installations. There is not a general sanction for the obligation to supply information for application permits.

	Art. 16(4) of Government Emergency Ordinance No. 195/2005 on environment protection). ***Art. 96 (3) 1[2] of GEO No. 195/2005***			
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation of the operator to comply with any of the requirements mentioned in the integrated environmental permit (specified at Article 9 to 16). ***Art 36(1)(c) of GEO No. 152/ 2005*** Obligation of the operator to notify on the terms mentioned by the integrated environment permit the results of installation's emissions monitoring or, within maximum 24 hours from such occurrence, any incidental, accidental or major accident emissions. ***Art. 36(1)(e) of GEO No. 152/ 2005*** Obligation of the operator to comply with any of the requirements mentioned in the integrated environment permit can also be sanctioned according to ***Art. 96 (3) 1 of GEO No. 195/2005.*** Obligation of the operator to comply with the obligation to assist competent control authorities, facilitate the verification, inspection or control of activities or ensure access to installations can be sanctioned according to ***Art. 96 (3) 5, 7 and 8 of GEO No. 195/2005.***	A fine of 50,000 to 100,000 RON (Euros 11,590 to 23,182) ***Art. 36(1) of GEO No. 152/2005*** Suspension of the permit in the conditions of Government Emergency Ordinance No. 195/2005 on environment protection. ***Art. 36(2) of GEO No. 152/2005*** A fine of 50,000 to 100,000 RON (Euros 11,590 to 23,182) ***Art. 36(1) GEO No. 152/2005*** Suspension of the permit in the conditions of Government Emergency Ordinance No. 195/2005 on environment protection. ***Art. 36(2) of GEO No. 152/2005*** A fine of 7,500 to 15,000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100,000 RON (Euros 11,590 to 23,182) for legal persons . ***Art. 96 (3) of GEO No. 195/2005*** A fine of 7,500 to 15000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100000 RON (Euros 11,590 to 23,182) for legal persons . ***Art. 96 (3) of GEO No. 195/2005***	Failure to report immediately any major accident. ***Art. 98 (2) 12 of GEO No. 195/2005***	Prison from 6 months to 3 years or criminal fine from 50,000 to 100,000 RON (Euros 11,590 to 23,182). ***Art. 98 (2) 12 of GEO No. 195/2005***

*ELVs: Emission Limit Values

Table 2.83 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Romania*

	Administrative		**Criminal**	

	Offences	Penalties	Offences	Penalties
Obligation to apply for an authorisation/ registration for new or existing installations	N/A	N/A	N/A	N/A
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the provisions of art. 3(3) (namely the obligation of existing installations' operators using a reduction scheme to notify it until 31 October 2005) and art. 8 (1) (namely, to supply the competent authority for the environmental protection, once a year or on request with data that enables the latter to verify compliance with GD 699/2003), of art 9. (namely to demonstrate to the competent authority compliance with ELVs and FEVs), with the requirements of Annex 4 (regarding the scheme of the reduction of volatile organic compounds) and with the provisions of art. 5(3) Liability under this article will also include a breach of art 9(2), namely following a substantial change within the installation, to demonstrate environmental protection compliance with GD No. 699/2003. ***Art. 14 (1)(a) of GD 699/2003***	A fine from 1,000 RON (Euros 232) up to 1500 RON (Euros 347) in case of natural persons and from 5,000 RON (Euros 1159) up to 7,500 RON (Euros 1,738) for legal persons. ***Art. 14 (1)(a) of GD 699/2003***	N/A	N/A

	Obligation to comply with the provisions of art. 3 (1) (the requirement that all new installations comply with articles 5, 8 and 9, of the Directive), breach of provisions of art. 5 (5) (requiring implementation of abatement equipment) and breach of provisions of art. 8 (2) (the obligation to perform measurements of emissions of organic compounds in accordance with the specified requirements). ***Art. 14 (1)(b) of GD 699/2003***	A fine from 2,000 RON (Euros 464) up to 3,000 RON (Euros 695) in case of natural persons and from 10000 lei (Euros 2,318) up to 15,000 lei (Euros 3,477) for legal persons. ***Art. 14 (1)(b) of GD 699/2003***		
	Obligation to comply with the provisions of art. 5 (1) (obligation to apply measures to ensure compliance with conditions of operation of installations) art. 5 (6) to (12) (including, inter alia, specific conditions on VOCs and risk phrases) and art. 7 (obligations of information, taking necessary measures and suspension of activities in case of breach of the GD). ***Art. 14 (1) (c) of GD 699/2003***	A fine from 3,000 RON (Euros 695) up to 4,500 RON (Euros 1,043) in case of natural persons and from 15,000 lei (Euros 3,477) up to 22,500 RON (Euros 5,216) for legal persons. ***Art. 14 (1) (c) of GD 699/2003***		
	Please note that failure of the operator to comply with the obligation to improve technological performances in view of emission reduction and of the obligation not to operate installations whose emissions exceed the limits established by regulations can also be sanctioned under Government Emergency Ordinance No. 195/2005 on environment protection). ***Article 96 (3) 13 of GEO No. 195/2005***	A fine of 7,500 to 15,000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100,000 RON (Euros 11,590 to 23,182) for legal persons. ***Article 96 (3) of GEO No. 195/2005***		

Table 2.84 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Romania*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirement: Obligation of the operators to inform within 48 hours the competent territorial public authority for the protection of the environment on the situations of inappropriate functioning or breakdown of the abatement equipments, as provided at art. 12 (2) (b) of GD No. 440/2010. ***Art. 23 (1) (a) of GD No. 440/2010***	A fine from 10,000 RON (Euros 2,318) to 15,000 RON (Euros 3,477). ***Art. 23 (1)(a) of GD No. 440/2010***	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to submit annually to the competent authority for the protection of the environment the report including the used and unused operating hours from the time granted for the remaining operational life of the large combustion plant (obligation provided art. 5(3) of GD No. 440/2010). ***Art. 23 (1)(a) of GD No. 440/2010*** Obligation of operators of large combustion plants – type I – which do not observe the maximum emission limits provided at annexes 3-7 part A to comply with the obligation to hold and update programs of progressive	A fine from 10,000 RON (Euros 2,318) to 15,000 RON (Euros 3,477). ***Art. 23 (1)(a) of GD No. 440/2010*** A fine from 10,000 RON (Euros 2,318) to 15,000 RON (Euros 3,477). ***Art. 23 (1)(a) of GD No. 440/2010***	N/A	N/A

	reduction of annual emissions of SO2, NOx and dust, in the view of reaching the emission limit values in the timeframe provided (obligation provided at art. 6 (1) of GD No. 440/2010). ***Art. 23 (1)(a) of GD No. 440/2010***			
	Obligation of operators of existing large combustion plants – type I – not included at Art. 6(1) and of holders of new large combustion plants – type II - to comply with the maximum emission limits provided at annexes 3-7 part A for SO2, NOx and dust (obligation provided at art. 6 (2) of GD No. 440/2010). ***Art. 23 (1)(a) of GD No. 440/2010***	A fine from 10,000 RON (Euros 2,318) to 15,000 RON (Euros 3,477). ***Art. 23 (1)(a) of GD No. 440/2010***		
	Obligation to comply with the conditions of functioning of large combustion plants having a thermal capacity at least 400 MW, provided at art. 10 (1) of GD No. 440/2010. ***Art. 23 (1)(b) of GD No. 440/2010***	A fine from 15,000 RON (Euros 3,477) to 20,000 RON (Euros 4,636). ***Art. 23 (1)(b) of GD No. 440/2010***		
	Obligation of the operators to inform the competent public authorities for the environment protection on the results of the continuous measurements, discontinuous measurements, control of the measurement equipments, as well as on all the operations related to the activity of monitoring the emissions of SO2, NOX and dust (provided at art. 18 of GD No. 440/2010). ***Art. 23 (1)(b) of GD No. 440/2010***	A fine from 15,000 RON (Euros 3,477) to 20,000 RON (Euros 4,636). ***Art. 23 (1)(b) of GD No. 440/2010***		
	Obligation of the operators to comply with the obligation provided at art. 12 (2) (a) to reduce or to interrupt the operation of the large combustion plant	A fine from 15,000 RON (Euros 3,477) to 20,000 RON (Euros 4,636). ***Art. 23 (1)(b) of GD No. 440/2010***		

	if a return to normal operation is not achieved within 24 hours, or to operate the plant using less polluting fuels in case of a malfunction or breakdown of the abatement equipment and failure to comply with the obligation provided at art. 12 (2) (c) to ensure that the cumulative duration of unabated operation shall not exceed 120 hours in any 12 months period in case of a malfunction or breakdown of the abatement equipment. ***Art. 23 (1)(b) of GD No. 440/2010***			
	Obligation of the operators to operate the existing large combustion plants – type I – and the new large combustion plants – type II – only if the conditions provided in Art. 5(1) of GD No. 440/2010 are fulfilled. ***Art. 23 (1)(c) of GD No. 440/2010***	A fine from 20,000 RON (Euros 4,636) to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Please note that failure of the operator to comply with the obligation to improve technological performances in view of emission reduction and of the obligation not to operate installations whose emissions exceed the limits established by regulations can also be sanctioned under GEO No. 195/2005. ***Article 96 (3) 13 of GEO No. 195/2005***	A fine of 7,500 to 15,000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100,000 RON (Euros 11,590 to 23,182) for legal persons. ***Article 96 (3) of GEO No. 195/2005***		
	Obligation of the operators of existing large combustion plants – type I which benefit of exemption to operate the plant for no more than 20.000 operational hours between 1 January 2008 and 31December 2015. ***Art. 23 (1)(c) of GD No. 440/2010***	A fine from 20,000 RON (Euros 4,636) to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Designing, construction or functioning	A fine from 20,000 RON (Euros 4,636)		

	of a new large combustion plants – type III- without observance of the maximum emission limits for SO2, NOx and dust provided at annexes 3-7 part B, as provided by Art. 9(1) of GD No. 440/2010. ***Art. 23 (1)(c) of GD No. 440/2010***	to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Obligation to discharge in controlled fashion by means of a stack of waste gases from large combustion plants, as provided by Art. 15(1) of GD No. 440/2010. ***Art. 23 (1)(c) of GD No. 440/2010***	A fine from 20,000 RON (Euros 4,636) to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Obligation to calculate the annual emissions of SO2, NOx and dust and concentrations in residual gases in accordance with articles 17 to 19 (obligation provided by Art. 20 of GD No. 440/2010). ***Art. 23 (1)(c) of GD No. 440/2010***	A fine from 20,000 RON (Euros 4,636) to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Obligation to observe the progressive reduction of annual total emissions of SO2, NOx and dust from large combustion plants in accordance with the national program, as provided at Art. 7 of GD No. 440/2010. ***Art. 23 (1)(c) of GD No. 440/2010***	A fine from 20,000 RON (Euros 4,636) to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Obligation to comply with the emission measurement methods provided in annex 2 of GD No. 440/2010. ***Art. 23 (1)(c) of GD No. 440/2010***	A fine from 20,000 RON (Euros 4,636) to 30,000 RON (Euros 6,955). ***Art. 23 (1)(c) of GD No. 440/2010***		
	Ascertaining cases of contraventions and enforcing the sanctions shall be made by appointed employees within the public authority for the protection of the environment.			

	Art. 23 (1)(c) of GD No. 440/2010			

Table 2.85 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Romania*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to operate in accordance with the provisions of the environment permit. ***Art. 96 (3) 1 of GEO No. 195/2005***	A fine of 7,500 to 15,000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100,000 RON (Euros 11,590 to 23,182) for legal persons. ***Art. 96 (3) of GEO No. 195/2005***	N/A	N/A
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out ay change of operation entailing incineration or co-incineration of hazardous waste (as specified at Art 8 (6) GD 128/2002, article which has a cross-reference to the provisions on substantial changes of GEO No 152/ 2005 on integrated pollution prevention and control) without notifying the competent authorities. The notification obligation falls on the operator of a incineration/co-incineration plant of non-hazardous waste. ***Art. 36(1)(d) of GEO No. 152/ 2005***	- A fine of 50,000 to 100,000 RON (Euros 11,590 to 23,182) ***Art. 36(1) of GEO No. 152/2005*** - Suspension of the permit in the conditions of Government Emergency Ordinance No. 195/2005 on environment protection ***Art. 36(2) of GEO No. 152/2005***	N/A	N/A
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of art. 16 on submitting the annual report to the competent authority for environmental protection and to grant access of the public to the information of public interest included in the report. ***Art. 18(2) (a) of GD 128/2002*** Obligation of the operators of the	A fine from 500 RON (Euros 116) to 1,500 RON (Euros 348) for natural persons and from 2,500 RON (Euros 580) to 7,500 RON (Euros 1,738) for legal persons. ***Art. 18(2) of GD 128/2002*** A fine from 500 RON (Euros 116) to	N/A	N/A

	incineration and co-incineration plants to comply with the provisions of art. 14 on setting the control and monitoring system and bearing of its costs. ***Art. 18(2) (b) of GD 128/2002***	1500 RON (Euros 348) for natural persons and from 2,500 RON (Euros 580) to 7,500 RON (Euros 1,738) for legal persons. ***Art. 18(2) of GD 128/2002***		
	Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of chapter 6 item 6.3 of annex 2, on putting into operation and appropriate functioning of the monitoring equipment. ***Art. 18(2) (c) of GD 128/2002***	A fine from 500 RON (Euros 116) to 1,500 RON (Euros 348) for natural persons and from 2,500 RON (Euros 580) to 7,500 RON (Euros 1,738) for legal persons. ***Art. 18(2) of GD 128/2002***		
	Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of art. 14 on the obligation to keep the registry evidencing the incinerated and co-incinerated waste. ***Art.18(2) (d) of GD 128/2002***	A fine from 500 RON (Euros 116) to 1,500 RON (Euros 348) for natural persons and from 2,500 RON (Euros 580) to 7,500 RON (Euros 1,738) for legal persons. ***Art. 18(2) of GD 128/2002***		
	Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of chapter 7 item 7.9 of annex 2, on recording and processing of all measurements. ***Art. 18(2) (e) of GD 128/2002***	A fine from 500 RON (Euros 116) to 1,500 RON (Euros 348) for natural persons and from 2,500 RON (Euros 580) to 7,500 RON (Euros 1,738) for legal persons. ***Art. 18(2) of GD 128/2002***		
	Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of chapter 2 items 2.1-2.8 of annex 2, on operating conditions. ***Art. 18(2) (f) of GD 128/2002***	A fine from 500 RON (Euros 116) to 1,500 RON (Euros 348) for natural persons and from 2,500 RON (Euros 580) to 7,500 RON (Euros 1,738) for legal persons. ***Art. 18(2) of GD 128/2002***		
	Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of chapter 1 items 1.3 and 1.4 of annex 2,	A fine from 5,000 RON (Euros 1,159) to 10,000 RON (Euros 2,318). ***Art. 18(3) of GD 128/2002***		

	on the reception of waste. ***Art. 18(3) of GD 128/2002***			
	Obligation of the operators of the incineration and co-incineration plants to comply with the provisions of chapter 7 items 7.2, 7.3, 7.9, 7.10, 7.14 and 7.16 of annex 2, on the measurements of polluters in water and air. ***Art. 18(4) of GD 128/2002***	A fine from 5,000 RON (Euros 1,159) to 10,000 RON (Euros 2,318). ***Art. 18(4) of GD 128/2002***		
	Obligation of the operator to comply with the emission limit values provided by chapter 3 of annex 2 of GD 128/2002, the offence can also be sanctioned under Government Emergency Ordinance No. 195/2005 on environment protection. ***Art. 96 (3) 13 of GEO No. 195/2005***	A fine of 7,500 to 15,000 RON for natural persons (Euros 1,739 to 3,477) and of 50,000 to 100,000 RON (Euros 11,590 to 23,182) for legal persons. ***Art. 96 (3) of GEO No. 195/2005***		

Annex XXII-Slovakia

SLOVAKIA

1. Overview of penalties related to legislation on industrial installations

In Slovakia, the legal obligations and penalties relating to industrial installations are mostly covered by the Act No. 245/2003 on integrated environmental pollution prevention and control and by the Air Act No. 137/2010. However, not all of the relevant directives were already transposed into the Slovak legal system.

IPPC Directive: This Directive has not yet been transposed into the national legal system. The Law No. 245/2003 on integrated environmental pollution prevention and control transposed the repealed Directive 96/61/EC of 24 September 1996 on integrated pollution prevention and control. The Law 245/2003 was later amended in 2004 (four times), in 2005 and in 2008, but the amendment of 2008 changed only the currency of penalties from Slovak Korunas (SKK) into Euros.[194] There were two more indirect amendments adopted in 2010. However, there was no amendment (or other act) transposing /referring to the IPPC Directive of 2008.

The Waste Incineration, the LCP and the VOC Directives: These directives were originally transposed by the Law No. 478/2002 on Air Pollution and by various ministerial decrees. The Law on Air Pollution and the relevant decrees were, however, repealed in 2010 by Air Law No. 137/2010. The Ministry of Environment has adopted decrees implementing the Directives. The VOC Directive is implemented by the ministerial decree No. 358/2010, the LCP Directive and the VOC Directive are implemented by the ministerial decrees No. 356/2010 and 363/2010, all of them of 12 August 2010. Relevant provisions on penalties are regulated also by the Act No. 245/2003 on integrated environmental pollution prevention and control.

The Slovak legal system operates with administrative, quasi-criminal[195] and criminal sanctions. The liability system applicable and the type of sanction imposed will depend on the consequences of the breach. The penalties applicable will vary according to the severity of the damage caused. Administrative sanctions include a defined range of fines which can be imposed by the administrative authority whose discretion is to decide the final sum of the fine. In case of criminal sanctions the Criminal Code provides a range of sanctions proportional to the severity of the damage caused. The Criminal Code No. 300/2005 (of 20 May 2005) recognises four types of damage: small damage (over Euro 266), larger damage (ten times more), significant damage (one hundred times more) and damage of great extent (five hundred times more).[196]

In case of damage to the environment, Slovak law also provides for damages to restore the environment to its prior state, ie before the damage was caused (*restitutio in integrum*). The Nature and Landscape Protection Act No. 543/2002 stipulates that so-called "social value of protected species, trees and biotopes" shall be expressed according to their biological, ecological and cultural value (or in the case of protected minerals and fossils, their scientific and national value). This value is also determined with regard to other factors such as the infrequence of their occurrence within the Slovak Republic and their endangerment. The precise values of particular species are stipulated by the Ministerial Decree No. 24/2003 of 09 January 2003 which executes a number of provisions in the Nature and Landscape Protection Act.

Competent administrative authorities can impose administrative penalties for breaches of environmental legal duties both on legal or natural persons. Fines are the most common sanctions imposed. Slovak law excludes the possibility of accumulating administrative and quasi-criminal

[194] 2008 (law No. 515/2008)
[195] The equivalent term used in Slovakia for *quasi criminal* is 'contravention'.
[196] Articles 125 – 126, Criminal Code No. 300/2005.

liability. Therefore, if the same act constitutes both an administrative and a quasi-criminal offence, only administrative sanctions may be imposed. In Slovakia, the main administrative enforcement bodies are the Ministry of Environment and the Slovak Environmental Inspectorate, both of which have country-wide competences. In contrast, territorial environmental law enforcement is the competence of regional and district environmental offices, local inspectorates and municipalities.[197]

Quasi-criminal liability[198] is similar to criminal liability, in that similar sanctions can be imposed. However, the quasi-criminal procedure is a simplified procedure and only natural persons may be subject to proceedings. At first instance, petty offences are considered by administrative authorities (or by police in certain cases, such as traffic contraventions) and not by judicial courts. Decisions of the administrative authorities can be appealed before the superior administrative authorities and then before regular courts. Quasi-criminal offences are regulated by the Law No. 372/1990 on petty offences and by other administrative laws. Before September 2010, only natural persons could be liable for criminal and quasi criminal offences[199]. The National Council of the Slovak Republic (Slovak Parliament) has adopted an amendment to the Criminal Code No. 300/2005 of 20 May 2005. According to the latest amendment (Law No. 224/2010 of 27 April 2010) *'[t]he court may order a legal person's property to be confiscated if a criminal offence has been committed, and if the legal person has acquired the property with relation to this criminal activity or earnings coming from this criminal activity. Alternatively, the court may order a legal person's funds confiscated if a criminal offence has been committed in relation to legal person's activity, from Euros 800 to Euros 1,660,000 confiscated.*[200]'

The Slovak Criminal Code includes the following crimes against the environment:

• Threatening and damage to the environment (Articles 300 and 301 of the Criminal Code): This covers intentional or negligent violations of generally binding legal regulations in the field of environmental protection which cause danger of damage to the environment; it also covers illegal construction within protected areas.

• Unauthorised waste treatment (Article 302): waste treatment in breach of generally binding legal regulations.

• Violating water and air protection (Articles 303 – 304): any act in breach of generally binding legal regulations which causes deterioration of air quality, or of ground waters or surface waters quality. This crime also covers negligent violations of generally binding legal regulations which cause breakdown of air or water quality.

• Violating plants and animals protection (Article 305): any act in contradiction with generally binding legal regulations that causes damage, destroying, removal, gathering of protected plant or of its biotope; killing, wounding, catching, removing of protected animal or damage or destroying of its biotope and dwelling; damage or destroying of a tree or a bush, or cutting them down; threat to a protected animal species or plant species.

• Violating trees and bushes protection (Article 306): any act in contradiction with generally binding legal regulations that causes damage or destruction of a tree or a bush.

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[197] Fabry M. and Rybar T., Chapter 42 – Slovakia in *The international comparative legal guide to: Environmental Law 2010 – A practical cross-border insight into environment law*, Global Legal Group, London, 2010. Available at: http://www.iclg.co.uk/index.php?area=4&country_results=1&kh_publications_id=141&chapters_id=3628

[198] The following terms can be used as synonyms for quasi criminal sanctions: 'sanctions for petty offences', 'administrative criminal sanctions'.

[199] Petty offences law, Article 6: A natural person holds the liability and might be punished by the administrative authorities for breach of legal duties, if the natural person was acting or had to act on behalf of a legal person.

[200] Balcar Polanský Eversheds s.r.o., Legal News, July 2010. Available at: http://www.balcarpolansky.cz/files/74/Legal%20News%20July.pdf

• Spreading of infectious animals and plants disease (Articles 307 – 308)

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Slovakia

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Slovakia
IPPC Directive	
Catch-all	C
4	X
5	X
6	X
9	X
12 (1)	X
12 (2)	-
14 (a)	X
14 (b)	X
14 (c)	-
VoC Directive	
Catch-all	C
3(2)	X
4(4)	-
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X

10	X
13	X
WID Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	-
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	-
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Slovakia. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.86 *Directive 2008/1/EC (IPPC Directive)[201]: types of offences and related administrative and criminal penalties in Slovakia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to submit application for permission within a prescribed time limit. *Law 245/2003 (as amended), Article 24 paragraph 1 (c)* Conducting activity without permission or in conflict with the permission. ***Law 245/2003 (as amended), Article 24 paragraph 3 (a)***	An administrative fine up to Euros 16,596,95 for not submitting application for permission within prescribed time limit. *Law No. 245/2003 (as amended)* An administrative fine up to Euros 331,939, 18 for conducting activity without permission or in conflict with the permission. ***Law No. 245/2003 (as amended)***	Threatening and damaging the environment: any person (natural or legal) who intentionally or by negligence causes certain damage to the environment by violating generally binding legal regulations on environmental protection or natural sources protection. Unauthorised waste treatment, contravening water and air protection: any person who contravenes generally binding legal regulations within waste management, or any person contravening generally binding legal regulations in the field of air and water protection and causes deterioration of water or air quality, or causes certain damage. ***Criminal Code 300/2005 (as amended), Articles 300 through 306.***	Natural persons may be punished with imprisonment up to ten years, depending on damage and/or ban on operation. Legal entities may be punished with a fine from Euros 800 up to Euros 1,660,000. Natural persons may be punished with imprisonment up to eight years and/or ban on operation. Legal entities may be punished with a fine from Euros 800 up to Euros 1,660,000. ***Criminal Code 300/2005 (as amended), Articles 300 to 306, Article 83a***
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to supply information for application for permits. ***Law 245/2003, Article 24 paragraph 2 (b)***	An administrative fine up to Euros 16,596, 95. An administrative fine up to Euros 33,193,91. ***Law 245/2003 (as amended)***	As above	As above
Obligation to notify the competent authority of any changes in the operation of	Infringement or non-compliance with the following requirement: Obligation to provide updated	An administrative fine up to Euros 33,193, 91. ***Law 245/2003 (as amended)***	As above	As above

[201] Milieu Ltd, *Report on the penalties applicable for infringement of the provisions of the REACH Regulation, Annex V Comparison wtih comparable offences,* for the European Commission (DG Environment), March 2010. Available at: http://ec.europa.eu/environment/chemicals/reach/enforcement_en.htm

an installation	information on the changes of operation of the installation. ***Law 245/2003), Article 24 paragraph 2 (a)***			
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to comply with the conditions included in the permit. ***Law 245/2003), Article 24 paragraph 3 (a)***	An administrative fine up to Euros 331,939,18. ***Law 245/2003 (as amended)***	As above	As above

*ELVs: Emission Limit Values

Table 87.2 *Directive 1999/13/EC (VOC Directive)*[202]*: types of offences and related administrative and criminal penalties in Slovakia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Conducting activity without authorisation. *Air Act 137/2010, Article 30 paragraph 2 (a), paragraph 4 (a), paragraph 6* *Ministerial Decree 358/2010*	An administrative fine depending on the size of installation: An operator of large installation may be punished by fine from Euros 330 up to Euros 170,000). An operator of medium sized installation may be punished by fine from Euros 160 up to Euros 33,000. An operator of small installation may be punished by fine from Euros 33 up to Euros 3,300. ***Air Act 137/201, Article 30 paragraph 2 (a), paragraph 4 (a), paragraph 6***	Threatening and damaging to the environment: any person (natural person or legal entity) who intentionally or by negligence causes certain damage to the environment by violating generally binding legal regulations on environmental protection or natural sources protection. Unauthorised waste treatment, contravening water and air protection: any person who contravenes generally binding legal regulations within waste management, or any person contravening generally binding legal regulations in the field of air and water protection and causes deterioration of water or air quality, or causes certain damage. ***Criminal Code 300/2005), Articles 300 through 306***	Natural person may be punished with imprisonment up to ten years, depending on damage. Legal entity may be punished by financial fine from Euros 800 up to Euros 1,660,000. Natural person may be punished with imprisonment up to eight years. Legal entity may be punished with financial fine from Euros 800 up to Euros 1,660,000. ***Criminal Code 300/2005), Articles 300 to 306, Article 83a***
Obligation to supply information for application for permits				
Obligation to notify the				

[202] Milieu Ltd, *Study on Criminal Penalties in a Few Candidate Countries' Environmental Law*, for the European Commission (DG Environment), Contract No. B4-3040/2002/342084/MAR/A3, 6 October 2003. Available at:http://ec.europa.eu/environment/legal/crime/pdf/criminal_pen_vol2.pdf.
The study used the following resources: Act N. 478/2002 on Air Protection and on modifications and amendments to some other acts, Act N. 140/1961 Coll. – Criminal Code as amended by the act n.120/1962 Coll., act n.53/1963 Coll., act n. 184/1964 Coll., act n.56/1965 Coll., act n.81/1966 Coll., act n.148/1969 Coll., act n.45/1973 Coll., act n.43/1980 Coll., act n.10/1989 Coll., act n.159/1989 Coll., act n.47/1990 Coll., act n.84/1990 Coll., act n.175/1990 Coll., act n.457/1990 Coll., act n.545/1990 Coll., act n.490/1991 Coll., act n.557/1991 Coll., act n.60/1992 Coll., sentence of the Constitutional Court of the Czech and Slovak Federative Republic from 6 September 1992 published in part 93 of the Collection of Laws from 1992, act n. 177/1993 Coll., act n.248/1994 Coll., act n.102/1995 Coll., act n.233/1995 Coll., act n.100/1996 Coll., act n. 13/1998 Coll., act n.129/1998 Coll., act n.10/1999 Coll., act n.183/1999 Coll., act n.399/2000 Coll., act n.253/2001 Coll., act n.485/2001 Coll., decree of the Constitutional Court of the Slovak Republic n. 38/2002 Coll., act n. 237/2002 Coll., act n.421/2002 Coll and act n. 448/2002 Coll.

competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the requirements stipulated by law (eg monitoring requirements, failure to keep emission limits, failure to meet operation conditions, technical requirements and general conditions to operate stationary installations). ***Article 30 paragraphs 2 (a), 3 (a), 4, 5, 6*** Obligation to notify Environmental inspection and Environmental district authority in case of contravention of emission limits. ***Air Act 137/2010, Ministerial Decree 358/2010, Article 30 paragraphs 3 and 5***	An administrative fine depending on the size of installation: An operator of large installation may be punished by fine from Euros 330 up to Euros 170,000; An operator of medium sized installation may be punished by fine from Euros 160 up to Euros 33,000, or from Euros 33 up to Euros 6,700; An operator of small installations may be punished by fine from Euros 33 to Euros 3,300. ***Air Act 137/2010, Article 30 paragraphs 2, 3, 4, 5, 6***	As above	As above

Table 2.88 *Directive 2001/80/EC (LCP Directive)[203]: types of offences and related administrative and criminal penalties in Slovakia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Infringement or non-compliance with the following requirement : Obligation to notify relevant Regional environmental authority, District environmental authority and Environmental Inspection about serious and imminent of threaten or deterioration of air quality; at the same time to inform public with appropriate means. ***Air Act 137/2010,*** ***Article 30 paragraphs 3, 5*** ***Ministerial Decree No. 356/2010***	An administration fine depending upon the size of installation: An operator of large installation may be punished with a fine from Euros 160 up to Euros 33,000; An operator of medium sized installation may be punished with a fine from Euros 33 up to Euros 6,700. ***Air Act 137/2010, Article 30 paragraphs 3 and 5***	Violation of the general provisions against endangering the environment or acting contrary to environmental protection laws. ***Criminal Code Article 300*** Violation of the general provisions against endangering the environment or acting contrary to environmental protection laws (negligent form). ***Criminal Code Article 301.***	Imprisonment up to 3 years ***Criminal Code Article 300 paragraph 1*** Imprisonment from 1 to 5 years ***Criminal Code Article 300 paragraph 2*** Imprisonment from 1 to 5 years, imprisonment from 3 to 8 years, imprisonment from 4 to 10 years ***Criminal Code Article 300 paragraphs 3, 4, 5 - aggravating situation*** Imprisonment up to 1 year ***Criminal Code Article 301 paragraph 1*** Imprisonment up to 3 years. ***Criminal Code Article 301 paragraph***

[203] Milieu Ltd, *Study on Criminal Penalties in a Few Candidate Countries' Environmental Law*, for the European Commission (DG Environment), Contract No. B4-3040/2002/342084/MAR/A3, 6 October 2003. Available at:http://ec.europa.eu/environment/legal/crime/pdf/criminal_pen_vol2.pdf.
The study used the following resources: Act No 478/2002 on Air Protection, Ministerial order 706/2002 implementing Act No 478/2002 on Air Protection, n.43/1980 Coll., act n.10/1989 Coll., act n.159/1989 Coll., act n.47/1990 Coll., act n.84/1990 Coll., act n.175/1990 Coll., act n.457/1990 Coll., act n.545/1990 Coll., act n.490/1991 Coll., act n.557/1991 Coll., act n.60/1992 Coll., sentence of the Constitutional Court of the Czech and Slovak Federative Republic from 6 September 1992 published in part 93 of the Collection of Laws from 1992, act n. 177/1993 Coll., act n.248/1994 Coll., act n.102/1995 Coll., act n.233/1995 Coll., act n.100/1996 Coll., act n. 13/1998 Coll., act n.129/1998 Coll., act n.10/1999 Coll., act n.183/1999 Coll., act n.399/2000 Coll., act n.253/2001 Coll., act n.485/2001 Coll., decree of the Constitutional Court of the Slovak Republic n. 38/2002 Coll., act n. 237/2002 Coll., act n.421/2002 Coll and act n. 448/2002 Coll., Act No. 127/1994 on environmental impact assessment

				2 Imprisonment up to 3 years ***Criminal Code Article 301 paragraph 3 – aggravating situation*** Imprisonment from 3 to 8 years ***Criminal Code, Article 301 paragraph 4***
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the requirements stipulated by law, to keep emission limits, to meet operation conditions, and to operate stationary installations in accordance with general conditions, ***Article 30 paragraphs 2 (a), 3 (a), 4, 5, 6*** Obligation to notify the Environmental inspection and Environmental district authority in case of contravention of emission limits. ***Air Act 137/2010,*** ***Article 30 paragraphs 3 and 5*** ***Ministerial Decree 356/2010***	An administrative fine depending on the size of installation: An operator of large installation may be punished by fine from Euros 330 up to Euros 170,000; An operator of medium sized installation may be punished by fine from Euros 160 up to Euros 33,000, or from Euros 33 up to Euros 6,700; An operator of small installations may be punished by fine from Euros 33 to Euros 3,300 ; ***Air Act 137/2010) Article 30 paragraphs 2, 3, 4, 5, 6***	As above	As above

Table 2.89 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Slovakia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to submit application for permission within a prescribed time limit. ***Law 245/2003), Article 24 paragraph 1 (c)*** Conducting activity without permission or in conflict with the permission. ***Law 245/2003), Article 24 paragraph 3 (a)*** Conducting activity without authorisation. ***Air Act 137/2010, Article 30 paragraph 2 (a), paragraph 4 (a), paragraph 6)***	An administrative fine up to Euros 16,596,95 for not submitting application for permission within prescribed time limit. ***Law No. 245/2003*** An administrative fine up to Euros 331,939,18 for conducting activity without permission or in conflict with the permission. ***Law No. 245/2003*** An administrative fine depending on the size of installation: An operator of large installation may be punished by fine from Euros 330 up to Euros 170,000); An operator of medium sized installation may be punished by fine from Euros 160 up to Euros 33,000; An operator of small installation may be punished by fine from Euros 33 up to Euros 3,300 . ***Air Act 137/2010***	Threatening and damaging to the environment: any person (natural person or legal entity) who intentionally or by negligence causes certain damage to the environment by violating generally binding legal regulations on environmental protection or natural sources protection. Unauthorised waste treatment, contravening water and air protection: any person who contravenes generally binding legal regulations within waste management, or any person contravening generally binding legal regulations in the field of air and water protection and causes deterioration of water or air quality, or causes certain damage. ***Criminal Law 300/2005***	Natural person may be punished with imprisonment up to ten years, depending on damage. Legal entity may be punished by financial fine from Euros 800 up to Euros 1,660,000. Natural person may be punished with imprisonment up to eight years. Legal entity may be punished with financial fine from Euros 800 up to Euros 1,660,000. ***Criminal Law 300/2005, Articles 300 and 301***
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation to supply information for application for permits. *(Law 245/2003), Article 24 paragraph 2 (b)* The Air Act does not encompass any	An administrative fine up to Euros 16, 596, 95. An administrative fine up to Euros 33,193,91. *Law 245/2003*	As above	As above

	special provision on failure to supply information for application for permits.			
Obligation to notify the competent authority of any changes in the operation of an installation	Conducting activity without authorisation ***Air Act 137/2010), Article 24 paragraph 3 (a)*** Change of an incineration or co-incineration plant for non-hazardous waste into an incineration or co-incineration plant of hazardous waste is regarded as a substantial change. ***Ministerial Decree 356/2010***	An administrative fine depending on the size of installation: An operator of large installation may be punished by fine from Euros 330 up to Euros 170,000; An operator of medium sized installation may be punished by fine from Euros 160 up to Euros 33,000; An operator of small installation may be punished by fine from Euros 33 up to Euros 3,300. ***Air Act 137/2010***	As above	As above
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirements: Obligation to comply with the requirements stipulated by law, to keep emission limits, to meet operation conditions, and to operate stationary installations in accordance with the general conditions. ***Article 30 paragraphs 2 (a), 3 (a), 4, 5, 6*** Obligation to notify Environmental inspection and Environmental district authority in case of contravention of emission limits. ***Air Act 137/2010,*** ***Article 30 paragraphs 3 and 5 Ministerial Decree 356/2010***	An administrative fine depending on the size of installation: An operator of large installation may be punished by fine from Euros 330 up to Euros 170,000; An operator of medium sized installation may be punished by fine from Euros 160 up to Euros 33 000, or from Euros 33 up to Euros 6,700; An operator of small installations may be punished by fine from Euros 33 to Euros 3,300. ***Air Act 137/2010***	see above	see above

Annex XXIII-Slovenia

SLOVENIA

1. Overview of penalties related to legislation on industrial installations

In Slovenia, only administrative sanctions are provided for infringement to legislation on industrial installations.

The administrative penalties in Slovenia are regulated in the Minor Offences Act. This Act establishes the general rules applicable to offences and penalties in other Slovenian legislation, and also provides the uniform procedure to determine offences and penalties.

Minor offences are not prescribed by the Minor Offences Act but by other laws and regulations. The penalties may be prescribed as a range or as a fixed amount. If the fines are prescribed as a range, they should be within the following boundaries, pursuant to Article 17 of the Minor Offences Act:

- for natural persons: Euros 40 – 5,000,
- for individual entrepreneurs and other individuals engaging in commercial activities: Euros 200 – 150,000;
- for legal entities: Euros 200 – 250,000;
- for medium and large legal entities (with more than 200 employees): Euros 400 – 500,000;
- for responsible persons of legal entities, of individual entrepreneurs or of public authorities: Euros 40 – 10,000.

The fines, which are prescribed as a fixed amount, are lower; their maximums are:

- Euros 2,000 for natural persons,
- Euros 75,000 for individual entrepreneurs and
- Euros 125,000 for small legal entities and Euros 250,000 for medium and large legal entities).

In the English translation of the Environmental Protection Act, which is available on the web site of the Ministry of Environment and Spatial Planning, the "individual entrepreneurs" (samostojni podjetniki posamezniki) are wrongly translated as "sole traders and farmers". Individual entrepreneurs are in fact all natural persons that engage in any kind of commercial activity and are registered as such. "The responsible persons » are the managers or CEOs of legal entities or individual entrepreneurs, and heads of public administrative bodies.

The Minor Offences Act also prescribes an exception which allows the law or governmental decree to prescribe fines that are higher than those mentioned above. Namely, for the worst offences related to natural resources, environment, protection of nature, health and safety at work, or cultural heritage, the law or governmental decree can prescribe penalties which are three times higher than those provided for by the Minor Offences Act (for example: Euros 15,000 instead of Euros 5,000 for natural persons).

The framework Environmental Protection Act covers the range of sanctions that apply across the four EU Directives on industrial installations. The Act sets out a comprehensive regime for enforcing the various requirements of the Act. However, the Act does not apply an offence or penalty concerning the second category: obligation to supply information for application for permits. The obligation to supply the information exists (Article 57); there is simply no enforcement provision. This omission is not serious since the operator of an installation or a plant cannot get the permit if it does not supply the prescribed information in the application for permit. The second obligation is thus sanctioned in the first one.

Beside the offences and penalties from the Environmental Protection Act, which apply for all four Directives, the offences and penalties are also prescribed by the Governmental decrees which transpose the VOC Directive, LCP Directive, and WI Directive. IPCC Directive is the only directive whose sanctions are prescribed only by the framework Environmental Protection Act (Zakon o varstvu

okolja), adopted on 31 March 2004, published in Uradni list RS, nr. 41/2004, amended by Uradni list nrs. 17/2006, 20/2006, 49/2006, 66/2006, 112/2006, 33/2007, 57/2008, 70/2008, and 108/2009 (Hereinafter: Environmental Protection Act).

With regard to Directive 1999/13/EC (VOC Directive), in addition to the Environmental Protection Act, are also relevant:

- The Decree on limit values of atmospheric emissions of volatile organic compounds using organic solvents, (Uredba o mejnih vrednostih emisije hlapnih organskih spojin v zrak iz naprav, v katerih se uporabljajo organska topila), published in Uradni list RS nr. 112/2005, amended Uradni list RS, nr. 37/2007 and 88/2009 (hereinafter : VOC Decree-1).
- The Decree on the emission limit values of halogenated volatile organic compounds into the atmosphere from installations using organic solvents, (Uredba o mejnih vrednostih emisije halogeniranih hlapnih organskih spojin v zrak iz naprav, v katerih se uporabljajo organska topila), published in Uradni list RS nr. 112/2007, amended Uradni list RS nr. 37/2007 (hereinafter VOC Decree-2).

Similarly, in relation to Directive 2001/80/EC (LCP Directive), apart from the Environmental Protection Act, the Decree on emission limit values discharged into the atmosphere from large combustion plants, (Uredba o mejnih vrednostih emisije snovi v zrak iz velikih kurilnih naprav), published in Uradni List RS, nr. 73/2005, amended Uradni list RS, nr. 92/2007, hereinafter : LCP Decree) also sets sanctions**.**

Finally, the legislation transposing Directive (WI Directive) is also relevant, namely:

- The Decree on the Incineration of Waste, Uredba o sežiganju odpadkov, adopted on 26.6.2008, published in Uradni list RS, nr. 68/2008, amended 41/2009 (hereinafter: WI Decree-1);
- The Decree on the emission of substances into the atmosphere from waste incineration and co-incineration plants (Uredba o emisiji snovi v zrak iz sežigalnic odpadkov in pri sosežigu odpadkov), adopted on 7.6.2001, published in Uradni list RS, nr. 50/2001, amended by Uradni list RS nrs. 56/2002, 84/2002, 41/2004, 76/2010 (hereinafter WI Decree-2).

The Inspectorate is responsible for control over compliance with the Environmental Protection Act and implementing regulations. If the installation operates without a permit or if the conditions of the permit are not complied with, an inspector can impose various administrative measures and/or sanctions, including:

- cessation of the infraction;
- corrective measures;
- limitation or adaptation of operation;
- monitoring;
- prohibition of operation or use of a facility or product and its placing on the market;
- propose withdrawal of the environmental permit; and
- impose fines.

There are no criminal penalties that apply to the four categories above.

Slovenia became the Euro-zone member in 2007. The fines prescribed before that date are nominated in Slovenian Tolar (SIT) and must be converted into Euro in accordance with exchange rate 1 euro = 239.64 SIT.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Slovenia

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Slovenia
IPPC Directive	
Catch-all	-
4	X
5	X
6	-
12 (1)	X
12 (2)	X
14 (a)	-
14 (b)	-
14 (c)	-
VOC Directive	
Catch-all	-
3(2)	X
4(4)	X
5 (2)(a)	-
5 (2)(b)	-
5 (4)	-
5 (5)	-
5 (6)	X
5 (8)	-
5 (9)	-
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	-
4 (1)	-
4 (2)	X
4 (3)	-
5	-
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	-
4 (1)	X
4 (2)	-
4 (8)	X
5 (1)	-
5 (2), (3) & (4)	X
6	X
7	X

8 (1)	X
8 (4)	-
8 (5)	-
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Slovenia. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.90 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Slovenia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	A legal entity that does not hold an environmental protection permit, for the operation of the installation referred to in Article 68 of this Act or the installation operates in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74);" ***Article 161(1)(3) Environmental Protection Act.*** ***or*** An independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 161(2) Environmental Protection Act.*** ***or*** A responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	• Legal entities: Euros 75,000 to 125,000 • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000 • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of a municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***	N/A	N/A
	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain. ***Article 161(4) Environmental***	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros 150,000 to 225,000; 3. a responsible person of the legal		

	Protection Act.	entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300. ***Article 161(4) Environmental Protection Act.***		
Obligation to supply information for application for permits	No relevant offence has been identified.		N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	A legal entity that does not inform the ministry and carries out a change in the operation of the installation referred to in Article 68 of this Act (first paragraph of Article 77);" ***Article 162(1)4 Environmental Protection Act*** ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph;" ***Article 162(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 162(3) Environmental Protection Act.***	• Legal entities: Euros 40,000 to 75,000; • an independent entrepreneur or an individual who independently performs an economic activity: Euros 30,000 to 50,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: Euros 2,000 to 3,500. ***Articles 162(1) to 162(3) Environmental Protection Act.***	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	A legal entity not holding an environmental protection permit for the operation of the installation referred to in Article 68 of this Act, or	Legal entities: Euros 75,000 to 125,000 • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to	N/A	N/A

	operating the installation in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74)," ***Article 161(1)4 Environmental Protection Act.*** ***or*** independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 161(2) Environmental Protection Act*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	75,000 • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of the municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***		
	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain. ***Article 161(4) Environmental Protection Act.***	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros 150,000 to 225,000; 3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300 . ***Article 161(4) Environmental Protection Act.***		

*ELVs: Emission Limit Values

Table 91.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Slovenia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	A legal entity that does not hold an environmental protection permit, for the operation of the installation referred to in Article 68 of this Act or the installation operates in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74);" ***Article 161(1)3 Environmental Protection Act. (this offence relates to the installation that needs an IPCC permit)*** ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph;" ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	• Legal entities: Euros 75,000 to 125,000 ; • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of a municipality: 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***	N/A	N/A
	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros		

	gain. ***Article 161(4) Environmental Protection Act.***	150,000 to 225,000; 3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300. ***Article 161(4) Environmental Protection Act.***		
	A legal entity that does not hold an environmental protection permit, for the operation of the installation referred to in Article 82 of this Act or the installation operates in violation of the permit (first paragraph of Article 82 and third paragraph of Article 83);" ***Article 161(1)5 Environmental Protection Act.*** *(this offence relates to installations that do not need an IPCC permit but a regular environmental permit)* ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph;" ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	• Legal entities: Euros 75,000 to 125,000; • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of a municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***		

	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain. ***Article 161(4) Environmental Protection Act.***	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros 150,000 to 225,000; 3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300. ***Article 161(4) Environmental Protection Act.***		
	Article 31(1) of VOC Decree-1 prescribes the fine for the violation of ***Article 24*** of this Decree, which provides for mandatory registration or environmental permit for new or existing installations.	• Legal entities: from Euros 4,000 to 40,000; • an independent entrepreneur: from Euros 4,000 to 40,000; • a responsible person of a legal entity and a responsible person of an independent entrepreneur: from Euros 1,200 to 4,000. ***Article 31(1), (2) and (3) of the VOC Decree-1***		
	Article 36(1) of the VOC Decree-2 prescribes the fine for the violation of ***Article 30(1) and (2)***, which provides for the mandatory registration or an environmental permit for installations.	• Legal entities and independent entrepreneurs: from Euros 4,000 to 40,000 • a responsible person of a legal entity and a responsible person of an independent entrepreneur: from Euros 1,200 to 4,000. ***Article 36(1), (2) and (3) of the VOC Decree-2***		
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an				

installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	***Article 31 of VOC Decree-1*** prescribes the fines for the breach of the following relevant provisions of this Decree: - ***Article 9(2)*** which prescribes that the operator shall replace the substances with less harmful substances, if technically possible, and in accordance with the environmental permit or registration; - ***Article 9(3)*** which prescribes that the operator must ensure safety measures to prevent the emissions during start-up and shut-down of the installation; - ***Article 9(4)*** which prescribes that the operator shall inform the environmental inspector if his installation does not conform to the emission standards; - ***Article 19(1)*** which prescribes the monitoring obligation of the operator; - ***Article 21(1)*** which prescribes the annual balance statements from the operators; - ***Article 21(3)*** which prescribes the operator to keep the documents which were the basis for balance statements (8 and 9) - ***Article 26(1)*** which prescribes that the Ministry registers the installation upon the application of the operator - ***Article 27*** which mandates the operator to inform the Ministry about significant changes of use of organic solvents; - ***Article 33***, which prescribes the	• Legal entities: from Euros 4,000 to 40,000; • an independent entrepreneur: from Euros 4,000 to 40,000; • a responsible person of a legal entity and a responsible person of an independent entrepreneur: from Euros 1,200 to 4,000. ***Article 31(1), (2) and (3) of the VOC Decree-1***	N/A	N/A

	mandatory registration or permit for installation that are not existing installations; - ***Article 34*** which prescribes the procedure in case of existing installations.			
	Article 36 of the VOC Decree-2 prescribes the fines for the violation of the following relevant provisions of this Decree: - ***Article 4*** which prescribes which halogenated organic solvent may be used in installations and how; - ***Articles 21 and 24***, which prescribes periodic and continuous measurements (monitoring) - ***Article 27***, which prescribes the content of the documentation about the operation of the installation - ***Article 29(2)*** which obliges the operator to inform an environmental inspector if his installation does not conform to the emission standards; - ***Article 33***, which mandates the operator to announce all changes to the installation or the use of halogenated substances to the Ministry of Environment and Spatial Planning; - ***Articles 38 and 39***, which prescribe the transitional provisions for existing installations.	• Legal entities and independent entrepreneurs: from Euros 4,000 to 40,000 • a responsible person of a legal entity and a responsible person of an independent entrepreneur: from Euros 1,200 to 4,000. ***Article 36(1), (2) and (3) of the VOC Decree-2***		

Table 2.92 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Slovenia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	A legal entity that does not inform the ministry and carries out a change in the operation of the installation referred to in Article 68 of this Act (first paragraph of Article 77);" ***Article 162(1)4 Environmental Protection Act.*** *(note: this offence relates to IPCC installations)* ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 162(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 162(3) Environmental Protection Act.***	• Legal entities: Euros 40,000 to 75,000; • an independent entrepreneur or an individual who independently performs an economic activity: Euros 30,000 to 50,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: Euros 2,000 to 3,500. ***Articles 162(1) to 162(3) Environmental Protection Act.***	N/A	N/A

	A legal entity that does not inform the ministry and carries out a change in the operation of the installation referred to in Article 82 of this Act (first paragraph of Article 77)," ***Article 162(1)4 Environmental Protection Act.*** *(note: this offence relates to installations that do not need an IPCC permit but only a "regular" environmental permit)* ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 162(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 162(3) Environmental Protection Act.***	• Legal entities: Euros 40,000 to 75,000; • an independent entrepreneur or an individual who independently performs an economic activity: Euros 30,000 to 50,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: Euros 2,000 to 3,500. ***Articles 162(1) to 162(3) Environmental Protection Act.***		
	Article 31 of LCP Decree prescribes the following offence: - if the operator of an installation does not report the breakdown or any other malfunction of the installation which resulted in exceeding the prescribed limits in accordance with Article 20 of this Decree".	Legal entities and independent entrepreneurs: 100,000 – 10,000,000 SIT (Euros 23,964,000 to 2,396,400,000) - responsible person of the legal entity or independent entrepreneur: 10,000 to 500,000 SIT (Euros 2,396,400 119,820,000). ***Article 31(1) and (2) of LCP Decree***		
Obligation to comply with the conditions set	A legal entity not holding an environmental protection permit for	Legal entities: Euros 75,000 to 125,000 • an independent entrepreneur or an	N/A	N/A

in the permit or mandatory ELVs	the operation of the installation referred to in Article 68 of this Act, or operating the installation in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74);" ***Article 161(1)4 Environmental Protection Act.*** *(note: this offence relates to IPCC installations)* ***or*** independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	individual who independently performs an economic activity: Euros 50,000 to 75,000 • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of the municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***		
	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain. ***Article 161(4) Environmental Protection Act.***	1. A legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros 150,000 to 225,000; 3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to		

		12,300. ***Article 161(4) Environmental Protection Act.***		
	A legal entity that does not hold an environmental protection permit, for the operation of the installation referred to in Article 82 of this Act or the installation operates in violation of the permit (first paragraph of Article 82 and third paragraph of Article 83);" ***Article 161(1)5 Environmental Protection Act.*** *(note: this offence relates to installations that do not need an IPCC permit but a regular environmental permit)* ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph;" ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	• Legal entities: Euros 75,000 to 125,000 • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000 • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of a municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***		
	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain.	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros150,000 to 225,000;		

	Article 161(4) Environmental Protection Act.	3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300. ***Article 161(4) Environmental Protection Act.***		
	Article 31 of LCP Decree prescribes the penalties for the breach of the following provisions of LCP Decree: - if the operator does not respect the time-limits of operation without the abatement equipment, and if it does not prevent the excessive discharges in accordance with ***Article 20 of LCP Decree***; - if the operator does not report to the Ministry for Environment about the annual operating scheme in accordance with ***Articles 10 and 14***; - if the operator does not perform monitoring activities in accordance with ***Articles 23 to 25 of LCP Decree***; - if the operator does not send the report about the annual quantities of particular emissions, daily emissions, and total emissions in prescribed time-limits in accordance to ***Article 26 of LCP Decree.***	• Legal entities or an independent entrepreneur: 100.000 to 10,000,000 SIT (Euros 23,964,0000 to 2,396,400,000); • a responsible person of the legal entity, or a responsible person of the independent entrepreneur: 10.000 to 500.000 SIT (Euros 2,396,400 119,820,000). ***Article 32() and (2) of LCP Decree***		

Table 2.93 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Slovenia*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	a legal entity that does not hold an environmental protection permit, for the operation of the installation referred to in Article 68 of this Act or the installation operates in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74);" ***Article 161(1)3 Environmental Protection Act.*** ***or*** an independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph;" ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	• Legal entities: Euros 75,000 to 125,000 ; • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of a municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***	N/A	N/A
	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain. ***Article 161(4) Environmental Protection Act.***	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros 150,000 to 225,000; 3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300. ***Article 161(4) Environmental Protection Act.***		
	An operator of an co-incineration plant who in contravention of the first paragraph of Article 4 of this Decree does not hold an environmental permit. ***Article 24(1) point 1 of the WI Decree-1.*** An operator of an incineration plant who in contravention of the second paragraph of Article 4 of this Decree does not hold an environmental permit.	• legal entity or an independent entrepreneur: Euros 10,000 to 40,000 • the responsible person of the plant operator: Euros 1,200 to 4,100. ***Article 24(1) and (3) of the WI Decree-1***		

	Article 24(1) point 2 of the WI Decree-1			
Obligation to supply information for application for permits	No relevant offence has been identified			
Obligation to notify the competent authority of any changes in the operation of an installation	See Table on IPPC.	See Table on IPPC.	N/A	N/A
	An operator of an incineration or co-incineration plant who plans the change in the operation of the plant, which involves the incineration of hazardous waste, and does not treat is as a major change in accordance with the IPPC provisions. ***Article 24(1) point 3 of the WI Decree-1***	• legal entity or an independent entrepreneur: Euros 1,000 to 40,000 • the responsible person of the plant operator: Euros 1,200 to 4,100 ***Article 24(1) and (3) of the WI Decree-1.***		
	a legal entity not holding an environmental protection permit for the operation of the installation referred to in Article 68 of this Act, or operating the installation in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74)," ***Article 161(1)4 Environmental Protection Act.*** independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	Legal entities: Euros 75,000 to 125,000 • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of the municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***		
Obligation to comply with the conditions set in the permits or mandatory ELVs	a legal entity not holding an environmental protection permit for the operation of the installation referred to in Article 68 of this Act, or operating the installation in violation of the permit (first paragraph of Article 68 and first paragraph of Article 74)," ***Article 161(1)4 Environmental Protection Act.*** independent entrepreneur or an individual, who independently performs an economic activity, for the offence referred to in the preceding paragraph." ***Article 161(2) Environmental Protection Act.*** ***or*** a responsible person of the legal entity, a responsible person of the independent entrepreneur, or a responsible person of the individual who independently performs an economic activity, for the offence referred to in the first paragraph of this Article." ***Article 161(3) Environmental Protection Act.***	Legal entities: Euros 75,000 to 125,000 • an independent entrepreneur or an individual who independently performs an economic activity: Euros 50,000 to 75,000; • a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, and a responsible person of the municipality: Euros 3,500 to 4,100. ***Articles 161(1) to 161(3) Environmental Protection Act.***		

	If the offence from the first paragraph of this article resulted in greater environmental damage in accordance with this act or it has been committed intentionally or to obtain economic gain. ***Article 161(4) Environmental Protection Act.***	1. a legal entity from Euros 225,000 to 375,000; 2. an independent entrepreneur, an individual who independently performs an economic activity: from Euros 150,000 to 225,000; 3. a responsible person of the legal entity, a responsible person of the independent entrepreneur, a responsible person of the individual who independently performs an economic activity, or a responsible person of the municipality: from Euros 10,500 to 12,300 . ***Article 161(4) Environmental Protection Act.***	N/A	N/A
	Article 24(1) of the WI Decree-1 prescribes the sanctions for the breach of the following provisions of WI Decree: - the operator does not determine the mass of each type of waste in accordance with ***Article 6(2);*** - the assessment of hazardous waste is not made prior to accepting hazardous waste in accordance with ***Article 6(3);*** - the operator does not ascertain the waste before the incineration in accordance with ***Article 8(1)***; - the operator incinerates waste in contravention to operating conditions prescribed in ***Article 11(1)***; - incinerates waste which contain more than 1% of halogenated organic matter, in contravention to ***Article 11(2)***, - does not install and use the automatic system for the prevention of waste feed in accordance with ***Article 11(3)***; - in violation of ***Article 12(1)*** does not ascertain that co-incineration of untreated mixed municipal do not reach the limit values, prescribed for the emission of matter from incineration plants; - the waste water resulted from the cleaning of gas is not discharged into sewage system or into waters in accordance with ***Article 13(1)***; - the operator does not prevent the leakage of waste by discharge of water into the ground and surface or underground water in violation of ***Article 13(2)***; - the operator does not provide appropriate containers which allow the treatment of water before its release into waters; - the operator does not install the measuring equipment and use the monitoring methods in accordance with ***Article 16***; - the time prescribed for operation with exceeded emission levels is exceeded in violation of ***Article 18(1)***; in the case of a breakdown, the operation is not reduced or	• legal entity or an independent entrepreneur: Euros 10,000 to 40,000 • the responsible person of the plant operator: Euros 1,200 to 4,100. ***Article 24(1) and (3) of the WI Decree-1.***		

	closed down in accordance with ***Article 18(2)***.			
	Article 24(2) of the WI Decree-1 prescribes the sanctions for the breach of the following provisions of WI Decree: - the operator does not treat the residues of incineration in accordance with ***Article 15(2)***; - the operator does make public the annual report on the functioning and monitoring of the plant in accordance with ***Article 17***.	• legal entity or an independent entrepreneur: Euros 3,500 to 10,000 • the responsible person of the plant operator: Euros 1,200 to 4,100. ***Article 24(2) and (3) of the WI Decree-1***		
	Article 27 point 1 of WI Decree-2 prescribes the following offence: - if the operator does not maintains the prescribed temperature from ***Article 12(2), (3) and (4***); - if the operator does not act in violation of ***Article 25*** in abnormal operating conditions.	• corporation, another legal entity, independent entrepreneur or individual who commits the offence: at least 200,000 SIT (Euros 47,928,000); • the responsible person of the corporation or another legal entity: at least 50,000 SIT (11,982,000). ***Article 27 point 1 of WI Decree-2***		

Annex XXIV-Spain

SPAIN

1. Overview of penalties related to legislation on industrial installations

The Spanish Constitution (Article 45) recognises everyone's right to an adequate environment and duty to preserve it. Art 45(3) specifies that for those that violate this duty, there should be criminal or, where required, administrative sanctions, as well as the obligation to restore the damage caused. It is the only case for which the Constitution foresees the establishment of specific sanctions in case of breaches of a Constitutional duty.

The IPPC Directive is transposed by the Law 16/2002 of 1st July 2002 on classified installations,[204] which sets the offences and related administrative sanctions.

The Royal Decrees transposing the VOC Directive, LCP Directive and the WI Directive in Spain do not set any specific sanctions related to the infringement of the requirements of these Directives. They however refer to the sanction regime of other environmental laws such as the Law 16/2002 on classified installations, the Law on waste, the Law on air quality and protection of the atmosphere,[205] the Law on water, the Law on coastal areas.[206] Therefore there are no specific sanctions for the infringements of the requirements of these Directives. This does not mean that the requirements of these Directives are not enforceable since they will be covered under broader offences such as for instance the infringement of general air emission limits under the Law on air quality and protection of the atmosphere.

Directive 1999/13/EC was transposed in the Spanish legal system by Royal Decree 117/2003 of 31 January on the limitation of emissions of volatile organic compounds due to the use of solvents in certain activities.[207] Installations falling within the scope of this Decree that also fall within the scope of Law 16/2002 shall be subject to the integrated environmental authorisation of this Law. The authorisation in that specific case will have to include emission limit values or emission reduction systems, as well as the other requirements of this Decree. The installations covered by this Royal Decree but not falling within the scope of Law 16/2002 shall provide a notification prior to their functioning to the administrative body responsible for registration and control.[208] This Royal Decree does not set any specific sanctions, it however provides that the infringements of its provisions will have to be qualified either as a petty offence, serious offence or very serious offence and are punishable under the provisions of Title IV of the Law 16/2002.

Directive 2001/80/EC was transposed by the Royal Decree 430/2004 of 12 March 2004 laying down new rules on the limitation of air emissions of certain pollutants from large combustion plants, and laying down certain conditions for the control of air emissions from oil refineries.[209] This Royal Decree does not set any specific sanctions. Article 19 of this Decree, however, provides that any violations of this Royal decree will be subject to the sanction regimes established by the relevant applicable laws and in any case, will be subject to the provisions on sanctions of Law 37/2007,[210] and

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[204] Ley 16/2002, de 1 de julio, de prevención y control integrados de la contaminación.
[205] Ley 34/2007, de 15 de noviembre, de calidad del aire y protección de la atmósfera.
[206] Ley 22/1988, de 28 de julio, de Costas.
[207] Real Decreto 117/2003, de 31 de enero, sobre limitación de emisiones de compuestos orgánicos volátiles debidas al uso de disolventes en determinadas actividades.
[208] See Article 3 of the Royal Decree 117/2003 of 31 January on the limitation of emissions of volatile organic compounds due to the use of solvents in certain activities.
[209] Real Decreto 430/2004, de 12 de marzo, por el que se establecen nuevas normas sobre limitación de emisiones a la atmósfera de determinados agentes contaminantes procedentes de grandes instalaciones de combustión, y se fijan ciertas condiciones para el control de las emisiones a la atmósfera de las refinerías de petróleo.
[210] Royal Decree 430/2004 of 12 March 2004 refers to Law 38/1978 on the protection of the atmospheric environment, however this Law was repealed by the new Law 37/2007 on air quality and the protection of the atmosphere (Ley 34/2007, de 15 de noviembre, de calidad del aire y protección de la atmósfera)

the Law 16/2002. Large combustion plants covered by Directive 2001/80/EC fall within the scope of Law 37/2007 and within the scope of Law 16/2002.

Related to the application of different sanctions for a similar offence, Article 33 of the Law 37/2007 and Article 34 of Law 16/2002 provide that in case an offender, for the same facts is punished under these laws (either Law 37/2007 or Law 16/2002) and under other laws, the most severe sanctions shall apply.

Directive 2000/76/EC was transposed in Spain by Royal Decree 653/2003 of 30 May on waste incineration.[211] This Decree does not contain any provisions on sanctions related to the infringement of the transposing provisions of Directive 2000/76/EC. The recitals of this Decree, however, provide that the sanction regime of various laws can apply depending on the provisions of the Royal Decree that are infringed. These are the Law 10/1998 on waste (more specifically Article 18 and 19(4)[212]), the Law on water and Law on coastlines related to the discharge of water with pollutants from the cleaning of exhaust gases from incineration and to the requirements regarding measurements and controls of discharge at sea and inland water, the Law 34/2007 on air quality and the protection of the atmosphere for the requirements on emission limit values and the Law 16/2002 that shall apply to hazardous waste incineration or co-incineration plants with a capacity exceeding 10 tonnes per day and to municipal waste incineration plants with a capacity of more than three tons per hour.

Pursuant to Article 4 of Royal Decree 653/2003, waste incineration or co-incineration plants falling under Law 16/2002 shall request the integrated environmental authorisation under this Law. Waste incineration and co-incineration plants out of the scope of Law 16/2002 shall request an authorisation required under Law 10/1998 on waste and Law 37/2007 on air quality and the protection of the atmosphere.

Administrative sanctions are the most common tools for the enforcement of environmental legislation in Spain. The sanctioning power of the administration is regulated by Law 30/1992 related to the legal regime of public administrations and to the common administrative procedure.[213] The classification of administrative offences and their related sanctions are however set in each specific sectors of the legislation. This is the case for the different sectoral legislation on the environment (e.g. Law 16/2002 on classified installations,[214] Law on water,[215] Law 10/1998 on waste[216]) that list the different offences classified as petty offences (*faltas leves*), serious offences (*faltas graves*) and very serious offences (*faltas muy graves)* and their corresponding administrative sanctions. These sanctions are not only fines but can also require the closure of an activity, the withdrawal of a permit, the prohibition to exercise an activity.

Environmental sectoral laws do not list any specific criminal offences. Criminal environmental offences and their related sanctions are only mentioned in Chapter III Title 16 of the Spanish Criminal Code. These offences are broad and cover general crimes against natural resources and the environment and also crimes related to the protection of the flora, fauna and domestic animals. The sanctions set in this Chapter can lead to imprisonment from 6 months to four years and/or fines from 8 to 24 months[217] and/or the prohibition to exercice a profesional activity. In the Spanish jurisdiction a legal person cannot be prosecuted in a similar way as an individual offender. The criminal liability goes for instance to the managers of the legal person but not directly to the legal person. Since 2004

[211] Real Decreto 653/2003 de 30 de mayo, sobre incinieracion de residuos
[212] Article 18 and 19(4) empower the government to establish the plant, processes, products requirements related to the recovery of waste and disposal of waste
[213]Ley 30/1992, de 26 de noviembre, de Régimen Jurídico de las Administraciones Públicas y del Procedimiento Administrativo Común.
[214] Ley 16/2002, de 1 de julio, de prevención y control integrados de la contaminación.
[215] Real Decreto Legislativo 1/2001, de 20 de julio, por el que se aprueba el texto refundido de la Ley de Aguas.
[216] Ley 10/1998, de 21 de abril, de Residuo.
[217] Pursuant to Article 50(4) of the Criminal Code the The daily rate of a fine can be set between 2 euros to 400 euros

and the entry into force of the Law of 15/2003 amending the Criminal Code[218] legal persons may be held jointly and severally liable for payment of the fines imposed on their managers as a consequence of a criminal offence.

Accumulation of administrative and criminal sanctions is not allowed. If an administrative procedure has been initiated with the objective of imposing a sanction, and the competent authority considers that the situation could constitute a crime, it should stop the procedure and transfer the case to the criminal jurisdiction. Only if the criminal jurisdiction considers that the situation cannot be qualified as a crime, the administrative body is allowed to continue the administrative procedure. The imposition of a criminal penalty excludes the possibility of imposition of an administrative sanction, in accordance with the principle of *non bis in idem*. For example, Article 33 of Law 34/2007, mentions that when the offence is considered a criminal offence, the administration shall inform the competent court, suspend the administrative proceedings and penalties until the judicial authority has issued a final decision.

Article 149(1)(23) of the Constitution of 1978 provides that the State has exclusive competence on matters related to the protection of the environment without prejudice to powers of the Autonomous Communities *(Comunidades Autonomas)* to take additional protective measures. In other words, the Autonomous Communities can provide more stringent and detailed environmental measures than the environmental legislation issued by the State which is regarded as a minimum legislation. With regard to environment, the Autonomous Communities pursuant to Article 148(1)(9) of the Constitution of 1978 are competent in the management of environmental matters. This provision implies that the Autonomous Communities are competent for the inspection and enforcement of environmental legislation and that they have sanctioning power.[219] For instance the Law 16/2002 on classified installations explicitly provides that the Autonomous authorities are competent to take measures on control and inspection for the enforcement of this Law. It also states that the offences encompassed in its Article 31 shall be without prejudice to the ones that can be established by the Autonomous authorities.

Several Autonomous Communities (e.g. Cataluña, Andalucía, Cantabria, Pais Vasco) but not all of them (e.g. Asturias, Madrid Community) have established their own sanctioning regime for the infringement of environmental legislation. Related to classified installations almost all of them refer to the same offences that the ones listed in Law 16/2002 on classified installations (e.g. the operation of an activity without the integrated environmental permit, or failure to comply with the conditions set in the integrated environmental permits). However the sanctions sometimes differ from the ones set in Law 16/2002. For instance the failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people can lead to a fine of 3 million euros in Cantabria,[220]2.4 million euros in Andalucía,[221] 2.5 million euros in Aragon,[222] while under Law 16/2002 the same offence can lead to a fine of 2 million euros.

As mentioned above the control and inspection for the enforcement of environmental legislation is under the competence of the Autonomous Communities. A network of environmental inspectors (*Red de inspeccion Ambiental)* has however been set up in order to harmonize and unify the inspection and control criteria in the different Autonomous Communities.

[218] Ley Orgánica 15/2003, de 25 de noviembre.
[219] See decision of the Constitutional Court *(Tribunal Constitucional) STC 102/1995, FJ 2 y18)*
[220] Ley de Cantabria 17/2006, de 11 de diciembre, de Control Ambiental Integrado
[221] Ley 7/2007, de 9 de julio, de Gestion Integrada de la Calidad Ambiental
[222] Ley 7/2006 de 22 de junio de proteccion ambiental de Aragon

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Spain

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions, which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive, are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code, which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Spain
IPPC Directive	
Catch-all	C
4	X
5	
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	
4(4)	
5 (2)(a)	
5 (2)(b)	
5 (4)	
5 (5)	
5 (6)	
5 (8)	
5 (9)	
5 (10)	
8 (1)	
9 (1)	
10 (a)	
LCP Directive	
Catch-all	C
4 (1)	
4 (2)	
4 (4)	
5	
7 (1)	
9	
10	
13	
WI Directive	
Catch-all	C
4 (1)	

4 (2)	
4 (8)	
5 (1)	
5 (2), (3) & (4)	
6	
7	
8 (1)	
8 (4)	
8 (5)	
8 (7)	
9	
10 (1)	
10 (2)	
11	
12 (2)	
13 (2)	
13 (3)	
13 (4)	

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Spain. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.1 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Spain*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Very serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation not less than two years and not more than five years - Prohibition to exercise this activity for a period not less than one year not more than two years. - Revocation or suspension of the approval for a period not less than one year no longer than five years. - Publication, through the means considered appropriate, of the sanctions, once they have become definitive. ***Article 32(1)(a) of the Law 16/2002***		
	Serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people ***Article 31(3)(a) of the Law 16/2002***	Sanctions related to serious offences - Fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the installation for a maximum period of two years - Prohibition to exercise this activity for maximum one year. - Revocation or suspension of the approval for a maximum period of one year. ***Article 32(1)(b) of the Law 16/2002***		
Obligation to supply information for application for permits	Petty offence Failure to comply with the requirements established in this Act or rules adopted pursuant thereto, unless it is classified as	Fine up to Euros 20,000 ***Article 32(1)(c) of the Law 16/2002***		

	very serious or serious offence ***Article 31(4)(b) of the Law 16/2002***			
Obligation to notify the competent authority of any changes in the operation of an installation	Petty offence Failure to comply with the requirements established in this Act or rules adopted pursuant thereto, unless it is classified as very serious or serious offence ***Article 31(4)(b) of the Law 16/2002***	Fine up to Euros 20,000 ***Article 32(1)(c) of the Law 16/2002***		
Obligation to comply with the conditions set in the permit or mandatory ELV's	Very serious offence Failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002*** Serious offence Failure to comply with the conditions established in the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people ***Article 31(3) (b) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation not less than two years and not more than five years - Prohibition to exercise this activity for a period not less than one year not more than two years. - Revocation or suspension of the approval for a period not less than one year no longer than five years. - Publication, through the means considered appropriate, of the sanctions, once they have become definitive ***Article 32(1)(a) of the Law 16/2002*** Sanctions related to serious offences - Fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the installation for a maximum period of two years - Prohibition to exercice this activity for maximum period of one year. - Revocation or suspension of the approval for a maximum period of one year ***Article 32(1)(b) of the Law 16/2002***		

*ELVs: Emission Limit Values

Table 2.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Spain*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Very serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002*** Serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people ***Article 31(3)(a) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation not less than two years and not more than five years - Disqualified to exercice this activity for a period not less than one year not more than two years. - Revocation or suspension of the approval for a period not less than one year no longer than five years. - Publication, through the means considered appropriate, of the sanctions, once they have become definitive ***Article 32(1)(a) of the Law 16/2002*** Sanctions related to serious offences - Fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the installation for a maximum period of two years - Disqualified to exercise this activity for maximum one year - Revocation or suspension of the approval for a maximum period of one year ***Article 32(1)(b) of the Law 16/2002***		
Obligation to supply information				

for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELV's	Very serious offence Failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002*** Serious offence Failure to comply with the conditions established in the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people ***Article 31(3)(b) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation not less than two years and not more than five years - Prohibition to exercice this activity for a period not less than one year not more than two years. - Revocation or suspension of the approval for a period not less than one year no longer than five years. - Publication, through the means considered appropriate, of the sanctions, once they have become definitive ***Article 32(1)(a) of the Law 16/2002*** Sanctions related to serious offences - Fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the installation for a maximum period of two years - Prohibition to exercice this activity for maximum one year. - Revocation or suspension of the approval for a maximum period of one year ***Article 32(1)(b) of the Law 16/2002***		

Table 2.3 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Spain*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Offences under the Law 16/2002 Petty offence Failure to comply with the requirements established in this Act or rules adopted pursuant thereto, unless it is classified as very serious or serious offence ***Article 31(4)(b) of the Law 16/2002***	Sanctions under the Law 16/2002 Fine up to Euros 20,000 ***Article 32(1)(c) of the Law 16/2002***		
Obligation to comply with the conditions set in the permit or mandatory ELV's	Offences under the Law 16/2002 Very serious offence Failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002***	Sanctions under the Law 16/2002 Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation not less than two years and not more than five years - Prohibition to exercice this activity for a period not less than one year not more than two years. - Revocation or suspension of the approval for a period not less than one year no longer than five years. - Publication, through the means considered appropriate, of the sanctions, once they have become		

		definitive ***Article 32(1)(a) of the Law 16/2002***		
	Serious offence Failure to comply with the conditions established in the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people ***Article 31(3)(b) of Law 16/2002***	Sanctions related to serious offences - Fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the installation for a maximum period of two years - Prohibition to exercice this activity for maximum one year. - Revocation or suspension of the approval for a maximum period of one year ***Article 32(1)(b) of the Law 16/2002***		
	Offences under the Law 34/2007 - Very serious offences Failure to comply with emission limit values, provided that it has generated or prevented to avoid air pollution that seriously endangers the health or safety of persons or has caused damage or serious deterioration of the environment. ***Article 30(2)(c) of the Law 34/2007*** Breach of the conditions on air pollution in the authorization or approval of the project subject to environmental impact assessment or in the classified installation permit, provided that it has generated or prevented to avoid air pollution that has endangered called safety or health of persons or has caused damage or serious deterioration of the environment. ***Article 30(2)(d) of the Law 34/2007*** Failure to apply technical requirements applicable to the activity, installation […] when it has generated or prevented to avoid air pollution that seriously endangers the health or safety of persons	Sanctions under the Law 34/2007 Sanctions related to very serious offences - A fine from Euros 200,001 to 2,000,000 - Closure of all or part of the activities and facilities. - Temporary closure of all or part of the activities or facilities for a period not less than two years not more than five years. - The sealing of equipment, machines and products for a period not less than two years. - The ban to exercise the activity for a period not less than one year not more than five years. - Withdrawal or suspension of authorizations in which conditions have been established relating to air pollution for a period not less than two years. - Publication through means deemed appropriate, of sanctions, once these have become final or, where appropriate court sanctions, and the names, surname or corporate name of		

	or has caused serious damage or deterioration to the environment. ***Article 30 (2)(e) of the Law 34/2007*** Failure to comply with the emission limit values requirements established by Law when it seriously endangers the health or safety of persons and causes damage or serious deterioration to the environment ***Article 30(2)(e) of the Law 34/2007*** <u>Serious offences</u> Failing to comply with emission limit values, when not classified as a very serious offence. ***Article 30(3)(c) of the Law 34/2007*** Breach of the conditions of air pollution in the authorization or approval of the project subject to environmental impact assessment or in the classified installation permit when not classified as a very serious offence. ***Article 30(3)(d) of the Law 34/2007*** Infringement of technical requirements that are applicable to the activity, installation […] when it materially affects the air pollution caused by such activity, installation […], unless it is established as very serious ***Article 30(3)(e) of the Law 34/2007*** <u>Petty offence</u> Infringement of technical requirements that are applicable to the activity, installation […] when it materially affects the air pollution caused by such activity, installation […], unless it is considered as a serious offence ***Article 30(4)(a) of the Law 34/2007***	the people or legal entities, and the feature and types of infringements. ***Article 31(1)(a) of the Law 34/2007*** <u>Sanctions related to serious offences</u> - A fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the activities or facilities for a maximum period of 2 years - The sealing of equipment, machines and products for a maximum period of two years. - The ban to exercise the activity for a maximum period of one year. - Withdrawal or suspension of authorizations in which conditions have been established relating to air pollution for a maximum period of two years. ***Article 31(1)(b) of the Law 34/2007*** <u>Sanctions related to petty offences</u> - A fine up to Euros 20,000 ***Article 31(1)(c) of the Law 34/2007***		

Table 2.4 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Spain*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Waste incineration plants covered by the Law 16/2002 Very serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002*** Serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people ***Article 31(3)(a) of the Law 16/2002***	Waste incineration plants covered by the Law 16/2002 Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation not less than two years and not more than five years - Prohibition to exercise this activity for a period not less than one year not more than two years. - Revocation or suspension of the approval for a period not less than one year no longer than five years. - Publication, through the means considered appropriate, of the sanctions, once they have become definitive ***Article 32(1)(a) of the Law 16/2002*** Sanctions related to serious offences - Fine from Euros 20,001 to 200,000 - Temporary closure of all or part of the installation for a maximum period of two years - Prohibition to exercise this activity for maximum one year. - Revocation or suspension of the approval for a maximum period of one year ***Article 32(1)(b) of the Law 16/2002***		

	Waste incineration plants not covered by Law 16/2002 Offences to Law 10/1998 Very serious offence: The operation of an activity without the required authorization provided that there has been a serious injury or damage to the environment or it seriously endangers the health of people or the activity takes place in protected areas. ***Article 34(2)(a) of the Law 10/1998*** Serious offences: The operation of an activity without the required authorization when there is no serious injury or damage to the environment or it does not endanger people's health ***(Article 34(3)(a) of the Law 10/1998)*** Offences to Law 34/2007 Very serious offence:	Waste incineration plants not covered by Law 16/2002 Sanctions under Law 10/1998 Sanctions related to very serious offences: - Fine: Euros 30,050.62 to 1,202,024.21 - When dealing with hazardous waste the fine is the following: Euros 300,506.06 to 1,202,024.21 - Prohibition to exercise this activity for a period not less than one year not more than ten years - Temporary or permanent closure of all or part of the facilities or equipment - The withdrawal of authorisation or suspension of it for no less than one year and more than ten years ***Article 35(1)(b) of the Law 10/1998*** Sanctions related to serious offences: - Fine: Euros 601.02 to 30,050.6 - When dealing with hazardous waste the fine is the following: Euros 6,010.13 to 300,506.05 - Prohibition to exercise this activity for a period of one year - The withdrawal of authorisation or suspension of it for a period of one year ***Article 35(1)(c) of the Law 10/1998*** Sanctions related to offences to Law 34/2007 Sanctions related to very serious offences:		

	The operation of an activity without the required authorization for activities potentially polluting the atmosphere, in case it has generated or did not prevent air pollution that seriously endangers the health or safety of persons or seriously damages or deteriorates the environment ***Article 30(2)(a) of the Law 34/2007***	- Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation for a period not less than 2 years and not more than 5 years. - The sealing of equipment, machines and products for a period not less than two years. - Prohibition to exercise this activity for not less than one year to a maximum of five year. - Revocation or suspension of the approval for not less than two years - Publication, through the means considered appropriate, of the sanctions, once they have become definitive ***Article 31(1)(a) of the Law 34/2007***		
	<u>Serious offence</u> The operation of an activity without the required authorization for activities potentially polluting the atmosphere when it is not considered as a very serious offence. ***Article 30(3)(a) of Law 34/2007***	<u>Sanctions related to serious offences:</u> - Fine from Euros 20,001 to 200,000 - Prohibition to exercise this activity for a maximum period of one year - Temporary closure of all or part of the installation for a maximum period of two years - The sealing of equipment, machines and products for a maximum period of two years - Revocation or suspension of the approval for a maximum period of two years - Revocation or suspension of the approval for a maximum period of two years ***Article 31(1)(b) of the Law 34/2007***		
Obligation to supply information for application for	<u>Waste incineration plants covered by Law 16/2002</u>	<u>Waste incineration plants covered by Law 16/2002</u>		

permits	Petty offence Failure to comply with the requirements established in this Act or rules adopted pursuant thereto, unless it is classified as very serious or serious offence ***(Article 31(4)(b) of the Law 16/2002)*** Offence under Law 10/1998 Serious offence: The failure to provide documents or the concealment or distortion of data required by applicable law or the stipulations contained in the authorization, and breach of the duty of custody and maintenance of such documentation ***Article 31(3)(c) of the Law 10/1998***	Sanction related to petty offence - Fine up to Euros 20,000 ***Article 32(1)(c) of the Law 16/2002*** Sanctions related to offence under Law 10/1998 Serious offence: - Fine: Euros 601.02 to 30,050.61 - When dealing with hazardous waste the fine is the following: Euros 6,010.13 to 300,506.05 - Prohibition to exercise this activity for a period of one year ***Article 35(1)(b) of the Law 10/1998***		
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the permits or mandatory ELV's	Offences to the Law on water Discharges that may impair water quality and drainage conditions of the receiving streams, made without authorisation. Those offences are qualified as minor, less serious, serious or very serious, according to their impact on the use of public water, their significance as regards the safety of persons and property and the circumstances of responsibility , the degree of malice, participation and benefit gained, and the impairment of the quality of the resource. ***Article 116(3)(f) of the Law on water***	Sanctions related to the offences to the Law on water: - Minor offences, a fine of up to Euros 6,010.12 - Less serious offences, a fine of Euros 6,010.13 to 30,050.61 - Serious offences, a fine of 30,050,.62 to 300,506.06 - Very serious offences, a fine of Euros 300,506.06 to 601,012.10 ***Article 117 of the Law on water***		

	Offences to the Coastal Law Discharge of wastewater without authorisation ***Article 97(2)(f) of the Coastal Law*** Offences to Law 10/1998 on waste Petty offence: Any offences to the requirements encompassed in that Law or in the authorisations that are not considered as a very serious offence or a serious offence (in that case Article 18 and Article 19(4)) ***Article 34(4)(d) of Law 10/1998*** Offences to Law 34/2007 Very serious offence: Failure to comply with emission limit values, provided that it has generated or did not prevent air pollution that seriously endangers the health or safety of persons or seriously damages or deteriorates the environment. ***Article 30(3) (c) of Law 34/2007***	Sanctions related to offences of the Coastal Law - Fine: Euros 300,506.05 ***Article 97(1)(a) of the Coastal Law*** - Restoration of the environment to its previous state ***Article 95(1)(a) of the Coastal Law*** Sanctions related to offences to the Law 10/1998 on waste: Fine: Euros 601.01 This fine goes to Euros 6,010.12 in case of dangerous waste ***Article 35(1)(c) of Law 10/1998*** Sanctions related to offences to the Law 34/2007 Sanctions related to very serious offences: - Fine from Euros 200,001 to 2,000,000 - Definitive closure of all or part of the installation - Temporary closure of all or part of the installation for a period not less than 2 years and not more than 5 years. - The sealing of equipment, machines and products for a period not less than two years. - Prohibition to exercise this activity for not less than one year to a maximum of five year. - Revocation or suspension of the approval for not less than two years		

	Serious offence Failure to comply with emission limit values when they are not considered as a very serious offence ***Article 30(3)(b) of the Law 34/2007***	- Publication, through the means considered appropriate, of the sanctions, once they have become definitive ***Article 31(1)(a) of the Law 34/2007*** Sanctions related to serious offences: - Fine from Euros 20,001 to 200,000 - Prohibition to exercise this activity for a maximum period of one year - Temporary closure of all or part of the installation for a maximum period of two years - The sealing of equipment, machines and products for a maximum period of two years - Suspension de las autorizaciones en las que se hayan establecido condiciones relativas a la contaminación atmosférica por un periodo máximo de dos años. - Revocation or suspension of the approval for a maximum period of two years ***Article 31(1)(b) of the Law 34/2007***		

Annex XXV-Sweden

SWEDEN

1. Overview of penalties related to legislation on industrial installations

The Environmental Code (*Miljöbalken*, SFS 1998:808), which entered into force in 1999, integrated a number of existing environmental acts into one single code. For the purposes of this study, amendments until SFS 2010:1542, including specific amendments and new penalties provisions, e.g. by (SFS 2010:923), (SFS 2010:742), (SFS 2010:210) are considered. The Environmental Code also set up environmental courts to replace water courts and the Licensing Authority. The Environmental Code is the main transposing legislation for the four Directives relevant to this report. It contains provisions for the relevant offences and penalties relating to industrial installations. More specific technical requirements are often transposed by ministerial ordinances in which reference to the sanction provisions in the Environmental Code is given.

The following legislation applies to all four Directives for the purposes of this study:

Environmental Code (SFS 1998:808) as amended by until SFS 2010:1542, including specific amendments and new penalties provisions, e.g. by (SFS 2010:923), (SFS 2010:742), (SFS 2010:210)

In addition, the following specific legislation applies:

IPPC Directive: Two ministerial ordinances: The Waste Disposal Ordinance (SFS 2001:512) (Förordning om deponering av avfall) and Ordinance on supervision of certain installations (SFS 2004:989) (Förordning om översyn av vissa miljöfarliga verksamheter).

VOC Directive: A number of ministerial ordinances and regulations of the Swedish Nature Protection Agency: Ordinance (SFS 1998:901) on operators controls, Ordinance (SFS 1998:905) on environmental impact assessment, Regulations of the Swedish Nature Protection Agency (NFS 2001:12), Ordinance (SFS1998:900) on environmental inspections, Ordinance (SFS 1998:899) on environmentally hazardous activities as amended.

LCP Directive: Regulations of the Swedish Nature Protection Agency (NSF 2002.26) (Naturvardsverkets föreskrifter om utsläpp till luft av svaveldioxid, kväveoxider och stoft fran förbränningsanläggningar med en installerad tillförd effekt pa 50 MW eller mer NFS n° 26 du 29/10/2002).

WI Directive: Ministerial Ordinance on Waste Incineration (SFS 2002:1060), Ministerial Ordinance on Waste (SFS 2001:1063) and Regulations of the Swedish Nature Protection Agency (NSF 2002:28) as amended.

Chapter 26 of the Environmental Code provides the competent authority (the inspector) the power to issue injunctions and prohibitions with or without fines, to ensure compliance with legal rules, permits and decisions. It may also prescribe corrective measures, which are taken at the offender's expense. The competent authority reports infringements to the police or the public prosecution authorities. The Environmental Code provides for the principle of proportionality with regard to administrative enforcement measures, which should not be more intrusive than necessary in individual cases and take into account the circumstances of each particular situation such as the risk and type of negative impact on the environment.

Chapter 30 of the Environmental Code regulates the Environmental Sanction Fee (ESF). The ESF is an administrative sanction imposed by the competent authority and is based on the principle of strict liability. The situations in which the competent authority may impose an ESF are set out in the Governmental Decree on ESF (SFS 1998:950). The ESF has been considered as a quasi-criminal tool, as *the fees are decided by the supervision authority (which is not a court), but they are written in such a manner (strict liability) that, in some situations, they should be considered as if they were criminal penalties.*[223]

Chapter 29 of the Environmental Code sets criminal penalties that include imprisonment and additional corporate fines in some circumstances, depending on the seriousness of the violation. For the purposes of this study, Chapter 29 is essentially a catch-all provision which applies to all relevant offences under the Code. Those obligations that are enforced by Chapter 29 are listed in detail.

The Criminal Code also provides offences and corresponding penalties and sanctions. The provisions of the Criminal Code have priority if the sanctions it lays down are equal or more severe than those established by the Environmental Code.

Administrative and criminal sanctions can apply simultaneously.

Control functions are primarily exercised by the state regional authorities, the county administrative boards. The municipalities are responsible for the supervision of other environmentally hazardous activities and can also take over the county administrative board's responsibility for supervising an activity, fully or partly.

Finally, the Swedish legal provisions relevant to this study apply to both natural and legal persons. The difference is, however, that additional financial penalties may (a) additionally apply to businesses, and (b) exist to enforce a wider range of the provisions (i.e., Chapter 30 Sections 1 & 2 of the Environmental Code). For example, although Sweden applies criminal sanctions to the first three categories relevant to this study, the fourth does not carry a criminal sanction. That said, the "special charge" set out in Chapter 30 Environmental Code does apply in such circumstances, but only to businesses.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in Sweden

The table below has been compiled on the basis of the information provided in the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. This was the case for Sweden the assessment is based on the assumption that the listed articles have been fully transposed. When there is a catch-all

[223] Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member States, Milieu Ltd/Huglo Lepage, 2004

provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	Sweden
IPPC Directive	
Catch-all	C
4	X
5	X
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VOC Directive	
Catch-all	C
3(2)	X
4(4)	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X

13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in Sweden. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.94 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Sweden*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirement : Obligation to comply with rules issued pursuant to the Environmental Code; Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification; or Infringement or non-compliance with the following requirement: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof. ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[224]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Any person who, whether deliberately or through negligence, starts or pursues an activity or takes some other measure without obtaining a decision concerning permissibility or a permit, approval or consent, or without submitting a notification required by the Code or by rules issued in pursuance. Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions. ***Chapter 29, Section 4 (b) of the Environmental Code***	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25, Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to supply information for application for permits	Failure to supply information for application for permits, including pursuant to the Environmental Code and the ministerial ordinances transposing the IPPC Directive provisions. (includes a failure to comply with other provisions in the Code, rules issued pursuant to the Code or provisions in EC Regulations governed by the Code. ***Chapter 30 Section (1)(3) of the Environmental Code***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[225]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30 Sections 1(1) & 2 of the Environmental Code***	Failure to supply information for application for permits, including pursuant to the Environmental Code and the ministerial ordinances (failure to comply with other provisions in the Code, rules issued pursuant to the Code concerning applications for certain installations. ***Chapter 29, Section (1)(c) of the Environmental Code***	Fines or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according ***to the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to notify the competent authority of	Failure to notify the competent authority of any changes in the operation of an	Environmental sanction charge (special charge)	Failure to notify the competent authority of any changes in the operation of an	Fines or up to two years imprisonment. ***Chapter 29, Section 4 of the***

[224] 1 EUR = 8.97710 SEK (22 December 2010)
[225] 1 EUR = 8.97710 SEK (22 December 2010)

any changes in the operation of an installation	installation. (Failure to comply with other provisions in the Code, rules issued pursuant to the Code or provisions in EC Regulations governed by the Codes.) ***Chapter 30 Section (1)(3) of the Environmental Code***	SEK 1,000 to 1,000,000 (Euros 111 - 111,394[226]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30 Sections 1(1) & 2 of the Environmental Code***	installation (including a failure to comply with other provisions in the Code, rules issued pursuant to the Code concerning applications for certain installations). ***Chapter 29, Section 4(1)(c) of the Environmental Code***	***Environmental Code*** A fine (proportional to one's daily income) according to the ***Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to comply with rules issued pursuant to the Code; Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification.; or Infringement or non-compliance with the following requirement: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof." ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[227]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions." ***Chapter 29, Section 4(b) of the Environmental Code***	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.

*ELVs: Emission Limit Values

[226] 1 EUR = 8.97710 SEK (22 December 2010)
[227] 1 EUR = 8.97710 SEK (22 December 2010)

Table 95.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in Sweden*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to comply with rules issued pursuant to the Code; Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification.; or Infringement or non-compliance with the following requirement: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof." ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[228]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Any person who, whether deliberately or through negligence, starts or pursues an activity or takes some other measure without obtaining a decision concerning permissibility or a permit, approval or consent or without submitting a notification required by the Code or by rules issued in pursuance. Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions. ***Chapter 29, Section 4(b) of the Environmental Code***	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25, Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or	Infringement or non-compliance with the following requirement: Obligation to comply with rules issued pursuant to the Code;	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[229]).	Any person who, whether deliberately or through negligence, starts or pursues an activity or takes some other measure without obtaining a decision	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.***

[228] 1 EUR = 8.97710 SEK (22 December 2010)

mandatory ELVs	Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification.; or <u>Infringement or non-compliance with the following requirement</u>: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof." ***Chapter 30 Sections 1 & 2 of the Environmental Code***	The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30, Sections 1 & 2 of the Environmental Code***	concerning permissibility or a permit, approval or consent or without submitting a notification required by the Code or by rules issued in pursuance Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions." ***Chapter 29, Section 4 (b) of the Environmental Code***	A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.

[229] 1 EUR = 8.97710 SEK (22 December 2010)

Table 2.96 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in Sweden*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out any changes in the operation on an installation without notifying the competent authority (Failure to comply with other provisions in the Code, rules issued pursuant to the Code or provisions in EC Regulations governed by the Code.) ***Environmental Code, Chapter 30 Section (1)(3)***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[230]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30, Sections 1(1) & 2 of the Environmental Code***	Failure to supply information for application for permits, including pursuant to the Environmental Code and the ministerial ordinances (Failure to comply with other provisions in the Code, rules issued pursuant to the Code concerning applications for certain installations ***Chapter 29, Section 4(1)(c) of the Environmental Code***	Fines or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to comply with rules issued pursuant to the Code; Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification.; or Infringement or non-compliance with the following requirement: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof."	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[231]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30, Sections 1 & 2 of the Environmental Code***	Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions. ***Chapter 29, Section 4 (b) of the Environmental Code***	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.

[230] 1 EUR = 8.97710 SEK (22 December 2010)

	Chapter 30 Sections 1 & 2 of the Environmental Code			

[231] 1 EUR = 8.97710 SEK (22 December 2010)

Table 2.97 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in Sweden*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Infringement or non-compliance with the following requirement: Obligation to comply with rules issued pursuant to the Code; Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification.; or Infringement or non-compliance with the following requirement: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof." ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[232]). The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30, Sections 1 & 2 of the Environmental Code***	Any person who, whether deliberately or through negligence, starts or pursues an activity or takes some other measure without obtaining a decision concerning permissibility or a permit, approval or consent or without submitting a notification required by the Code or by rules issued in pursuance Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions." ***Chapter 29, Section 4 b. the Environmental Code***	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25, Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to supply information for application for permits	Failure to supply information for application for permits, including pursuant to the Environmental Code and the ministerial ordinances transposing the IPPC Directive provisions. (Failure to comply with other provisions in the Code, rules issued pursuant to the Code or provisions in EC Regulations governed by the Code.) ***Environmental Code Chapter 30 Section (1)(3)***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[233]) The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30, Sections 1(1) & 2 of the Environmental Code***	Failure to supply information for application for permits, including pursuant to the Environmental Code and the ministerial ordinances (Failure to comply with other provisions in the Code, rules issued pursuant to the Code concerning applications for certain installations ***Chapter 29, Section (1)(c) of the Environmental Code***	Fines or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.

[232] 1 EUR = 8.97710 SEK (22 December 2010)
[233] 1 EUR = 8.97710 SEK (22 December 2010)

Obligation to notify the competent authority of any changes in the operation of an installation	Carrying out any changes in the operation on an installation without notifying the competent authority (Failure to comply with other provisions in the Code, rules issued pursuant to the Code or provisions in EC Regulations governed by the Code.) ***Environmental Code Chapter 30, Section (1)(3)***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[234]) The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30 Sections 1(1) & 2 of the Environmental Code***	Failure to supply information for application for permits, including pursuant to the Environmental Code and the ministerial ordinances (Failure to comply with other provisions in the Code, rules issued pursuant to the Code concerning applications for certain installations ***Chapter 29, Section 4(1)(c) of the Environmental Code***	Fines or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to the Criminal Code (SFS 1962:700), Chapter 25 Section 2 could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation to comply with rules issued pursuant to the Code; Commencing an activity for which a permit must be obtained without a permit on if the submission of a notification is required without notification.; or Infringement or non-compliance with the following requirement: Obligation to comply with the terms of a permit or conditions laid down pursuant to the Code or to rules issued in pursuance thereof." ***Chapter 30 Sections 1 & 2 of the Environmental Code***	Environmental sanction charge (special charge) SEK 1,000 to 1,000,000 (Euros 111 - 111,394[235]) The amount of the charge shall be determined with regard to the seriousness of the offence and significance of the provision in breach. ***Chapter 30, Section 1 & 2 of the Environmental Code***	Failure to comply, whether deliberately or through negligence, with a condition attached to a decision concerning permissibility or a permit, approval or exemption taken pursuant to the Code or to rules issued in pursuance thereof or in connection with a review of such permits or conditions. ***Chapter 29, Section 4 (b) of the Environmental Code***	Fine or up to two years imprisonment. ***Chapter 29, Section 4 of the Environmental Code.*** A fine (proportional to one's daily income) according to ***the Criminal Code (SFS 1962:700), Chapter 25 Section 2*** could also apply. Day-fines under the Criminal Code may apply to all offences in Sweden.

[234] 1 EUR = 8.97710 SEK (22 December 2010)
[235] 1 EUR = 8.97710 SEK (22 December 2010)

Annex XXVI-The Netherlands

THE NETHERLANDS

1. Overview of penalties related to legislation on industrial installations

In The Netherlands, the Environmental Management Act (*Wet Milieubeheer*, WM) was, until recently, the only the primary legislation relating to industrial installations. However, in October 2010, the Act on general provisions environmental law (*Wet Algemene bepalingen omgevingsrecht*, ("WABO"), entered into force.[236] WABO sets out the provisions for regulation of the environmental permit (*omgevingsvergunning*), which is an integrated permit for the purposes of construction, housing, monuments, space, nature and the environment. This includes permit requirements for IPPC, VOC, WI and LCP installations, such as the obligation to apply for an environmental permit, pursuant to Article 2.1(e).[237] The obligations established in WABO are further detailed in an Order in Council; the Decree on the law on environment (*Besluit Omgevingsrecht, BOR*), of which Article 2.1 designates the different categories of installations for which an environmental permit is required.[238] WABO covers indirect emissions to air, soil and water. In addition, the Water Act covers direct emissions to water.

IPPC Directive: The IPPC Directive is transposed by the WM and the Water Act. On 1 October 2010, the Law of 6 November 2008, establishing a licensing system regarding activities that affect, and the enforcement of rules relating to, the physical environment (The Act on general provisions environmental law), entered into force. Currently, WABO and the Water Act[239] (with which the Water Pollution Act is merged) transpose the IPPC Directive. The Decree on general provisions (BOR) further elaborates on the obligations laid down in WABO, such as the content of the permit. The Ministerial regulation on the environment (MOR) provides further detailed rules on certain aspects of WABO and the Decree on Environmental Law (BOR).

VOC Solvents Directive: The VOC Directive is transposed by the Solvents Decree.[240] In addition to the Solvents Decree, the Regulation solvents-accounting and measurements VOC emissions[241] (published in the Official Journal of 9 August 2001) further elaborates on the Solvents Decree; mainly by measuring and verifying emissions as well as setting requirements for the use of an accounting system for the use of solvents. The Official Journal of 9 August 2001 also published the Regulation regarding NeR (Dutch Emission Guidelines).[242] The Emission Guidelines for Air, is a national guideline, aimed at harmonising the environmental permits in the Netherlands with respect to abatement of emissions to the air. For this purpose, the NeR gives emission standards that agree with the Best Available Techniques (BATs).[243]

Waste Incineration Directive: The Waste Incineration Directive is transposed by the Decree on burning of waste (*Besluit verbranden afvalstoffen*, BVA), published in the Official Journal on 18 March 2004 and entering into force on 15 April 2004. In addition, the Directive is transposed by the Regulation laying down rules for discharges of waste water from the cleaning of waste gases

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[236] Wet van 6 november 2008, houdende regels inzake een vergunningstelsel met betrekking tot activiteiten die van invloed zijn op de fysieke leefomgeving en inzake handhaving van regelingen op het gebied van de fysieke leefomgeving (Wet algemene bepalingen omgevingsrecht).

[237] It is noted that before the entry into force of the Wabo, the environmental permit was regulated in Article 8.1 of the Environmental Management Act.

[238] *Besluit omgevingsrecht.*

[239] Wet van 29 januari 2009, houdende regels met betrekking tot het beheer en gebruik van watersystemen (Waterwet)

[240] Besluit van 19 maart 2001, houdende regels inzake het beperken van de emissie van vluchtige organische stoffen bij het gebruik van organische oplosmiddelen (Oplosmiddelenbesluit omzetting EG-VOS-richtlijn milieubeheer).

[241] Regeling van de Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer houdende voorschriften omtrent de inrichting van een oplosmiddelenboekhouding en nadere voorschriften omtrent metingen betreffende de emissies van VOS en de beoordeling van meetresultaten.

[242] Regeling van de Minister van Volkshuisvesting, Ruimtelijke Ordening en milieubeheer, houdende aanduiding van de van toepassing zijnde Nederlandse emissierichtlijn in het kader van het Oplosmiddelenbesluit omzetting EG-VOS-Richtlijn milieubeheer (Regeling aanduiding NeR).

[243] http://www.infomil.nl/english/subjects/air/netherlands-emission.

(Regeling lozingen afvalwater van rookgasreiniging),[244] as well as the WM.

LCP Directive: The LCP Directive is transposed by the Decree Emission Requirements Medium Combustion Plants (Besluit Emissie Eisen Middelgrote Stookinstallaties, BEES).[245] This Decree entered into force on 1 April 2010.

In the Dutch legal system, both criminal and administrative penalties can be imposed for a breach of the legislation on industrial installations. These two enforcement systems have different aims (compliance and punitive aims respectively). Consequently, offences may be determined as either being administrative and/or criminal in nature.

Administrative sanctions are primarily enforced pursuant to WABO (Chapter 5 on enforcement) and the WM (Chapter 18 on enforcement). The General Administrative Law Act (AWB) provides a comprehensive toolkit of enforcement measures for enforcement by competent authorities. The AWB lists four types of administrative sanctions for offences that (according to Article 5:1(3) AWB) can be applied to both natural and legal persons:

- Administrative order (*dwangsom*)

The administrative order (dwangsom) is a restorative sanction which aims at reversing the effects of the offence or preventing further violations (Article 5:32 AWB). According to Article 5:32a AWB, the administrative order describes the remedial action to be taken. The amount must be proportionate to the seriousness of the violated interest and the intended effect of the penalty imposed (article 5:32 (4) AWB). This amount is established by the competent authority. To ensure legal certainty for the permit holder, Article 5:23b(2) AWB obliges the competent authority to indicate the maximum total amount of the penalty that can be imposed under administrative order. The competent authority shall not make use of the administrative order if it is in conflict with the rule that requires protection or restoration (Article 5:32(3) AWB).

- Administrative coercion (*bestuursdwang*)

Applying coercive enforcement is one of the instruments competent authorities have against violations of the law. Article 5:21 of the AWB defines administrative coercion as a recovery sanction, which includes (a) the obligation to fully or partially recover damages for the offence, and (b) the competence of the competent authority to implement the obligation if not performed by the operator within a certain period of time. The municipality and province board are authorised to use this sanction pursuant to Article 125 of the Municipalities Act and Article 122 Provinces Act respectively. The sanction is used to bring the illegal situation back in line with the standards required by law. The competent authority may use 'actual measures' in order to remedy the breach (for example by demolishing an illegal structure). Before doing so, the competent authority must send a written warning to the offender, informing them to remedy the breach within a specified time period. It the offender fails to do so, the competent authority may proceed to take the actual measures to remedy the illegal situation. The written notification is subject to appeal. The decision specifies which regulation and law is being violated (Article 5:24 AWB). The cost of performing the 'factual measure' (such as removal of the illegal structure) may be recovered from the offender (Article 5:25 AWB).

- Administrative penalty

The administrative fine is a punitive sanction. This is in contrast to the other administrative tools which are not designed to punish a violation but to restore a situation when it violates the regulations, or to prevent their repetition. The administrative penalty does not require the competent authority to

[244] Regeling van 17 december 2002 houdende regels voor lozingen van afvalwater afkomstig van de reiniging van rookgassen.
[245] Besluit van 7 december 2009, houdende nieuwe regels voor de emissie van middelgrote stookinstallaties (Besluit emissie-eisen middelgrote stookinstallaties milieubeheer).

send a notification (warning) to the offender. Once a violation is detected (for example by inspectors), they can enforce through the use of administrative fines.

- Revocation of the permit

If an offence is committed by the holder of a permit, the full or partial withdrawal of the permit is often a sanction. The law and regulations under which the permits are issued establishes the rules concerning the revocation of the permit.

As defined in the WM and WABO, the competent authority is the authority that is competent to take a decision in relation to a request for an environmental permit, as well as in relation to permits that are already provided (such as the withdrawal of the permit). In case of non-compliance with the requirements set out in the legislation, the competent authorities can make use of these sanctions.

The competent authority identifies the remedial action to be taken and, when determining the amount of the administrative sanction (administrative order or penalty) takes into account the seriousness of the offence or the financial benefit that the offender obtained by committing the offence.

The WM defines the competent authority as the authority that is competent to provide a permit or to take other decisions (such as changes in requirements or withdrawal) (Articles 1.1 WM). According to Article 1.1(1) WABO, the competent authority is the authority that has to take a decision on an application for an environmental permit or in relation to an environmental permit that was already granted. Depending on the type of installation and scale of activity as well as the specific decree that regulates the subject matter, the competent authority is the board of the municipality or the province.

In addition to administrative sanctions, non-appliance with certain legislative obligations may also be subject to criminal sanctions. Criminal penalties and the ways in which they may be enforced are listed in the Economic Offences Act (WED). The WED is a framework law, which lists a wide variety of (economic) offences. It provides a list of provisions of several Acts and Decrees, (including WABO and the WM), breaches of which are classified as economic offences (*economisch delict*). Acting contrary to the requirements of a permit constitutes an offence. When a contrary act is deemed to be intentional, it is considered a crime.

The sanctions provided in the WED are divided into two categories.

- Category 1 crimes are punishable with six years in prison, community service or a fine of the fifth category, which can be up to Euros 76,000. Offences are punishable with one year in prison, community service or a fine of the fourth category (up to Euros 19,000).
- Category 2 crimes are punishable with two years in prison or a fine of the fourth category. Offences are punishable with six months in prison or a fine of the fourth category (up to Euros 19,000). Investigative officers are appointed (pursuant to Article 17 WED) to investigate the offences listed in the Act. There is no distinction between natural and legal persons. Non-compliance with Article 2.1 of WABO (regulating the environmental permit) is listed as an economic offence (*delict*) by Articles 1a(1) and (2) of the WED.

Article 6 WED establishes the maximum fine/prison sentence Article 6(1)(1) states that *offences,* mentioned in Article 1(1) and/or 1a(1), are punishable with one year imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000.[246] For offences other than those in Article 1(1) and 1a(1), the punishment can be imprisonment up to a maximum of six months, community service or a fine of the fourth category, which can be up to Euros 19,000.[247]

Article 6(1)(1) states that *crimes*, mentioned in Article 1(1) and/or 1a(1), are punishable with six years

[246] As at 01-01-2010.
[247] As at 01-01-2010.

imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000.[248] Other crimes, are punishable with a maximum of two years imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000.[249]

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in the Netherlands

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	The Netherlands[250]
IPPC Directive	
Catch-all	C
4	X
5	X
6	X
12 (1)	X
12 (2)	X
14 (a)	X
14 (b)	X
14 (c)	X
VoC Directive	
Catch-all	C
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
8 (1)	X
9 (1)	X
10 (a)	X

[248] As at 01-01-2010.
[249] As at 01-01-2010.
[250] The expert has checked that each of these provisions have been transposed. Non- compliance with these is considered an offence under the catch-all provisions in Chapter 5 of WABO

LCP Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (4)	X
5	X
7 (1)	X
9	X
10	X
13	X
WI Directive	
Catch-all	C
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in The Netherlands. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.98 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in The Netherlands*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Article 1.1(3) WABO requires that creating, modification of the operation and the operation of an IPPC installation is subject to prior review. Obligations to apply for an environmental permit can be found in Article 2.1(e) WABO (and Article 2.1(2) BOR) A failure to comply with these requirements *may be considered* an offence (see introduction). ***Article 2.1 WABO***	Chapter 5 of WABO regulates administrative enforcement. According to Article 5.19 WABO, the authority that is competent to grant or provide exemption for a permit, can withdraw, fully or partially, the permit or exemption if: a. the permit or exemption was issued due to an incorrect or incomplete information; b. non-compliance with permit or exemption; c. non-compliance with the regulations connected to the permit or exemption; d. the holder of the permit or exemption, does not respect general rules. On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanction (see introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	Article 1.1(3) WABO requires that creating, modification of the operation and the operation of an IPPC installation is subject to prior review. In general, obligations to apply for an environmental permit can be found in Article 2.1(1)(e) WABO. A failure to comply with these requirements *may be considered* an offence (see introduction). Non-compliance with Article 2.1(1)(e) WABO is listed as an economic offence (*delict*) ***Article 2.1(1)(e) WABO, Article 2.1(2) BOR***	Article 6 WED establishes the height of the fines/ years in prison. Article 6(1)(1) states *offences,* mentioned in Article 1(1) and/or 1a(1), and can be punished with one year imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000[251]. For other offences, the punishment can be imprisonment with a maximum of six months, community service or a fine of the fourth category, which can be up to Euros 19,000[252]. Article 6(1)(1) states that *crimes*, mentioned in Article 1(1) and/or 1a(1), are punished with six years imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000. For other crimes, the punishment can be imprisonment with a maximum of two years, community service or a fine of the fourth category, which can be up to Euros 19,000. ***Article 6(1)(1) WED***
Obligation to supply information for application for permits	Infringement or non-compliance with the following requirement: Obligation of the applicant to provide	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see	N/A	N/A

[251] As at 01-01-2010.
[252] As at 01-01-2010.

	the necessary information (in addition to Article 2.2. AWB). ***Article 4.4 BOR*** ***[Chapter 5 of WABO on enforcement sets sanction for non-compliance with implementing decrees eg BOR – see introduction]***	obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***		
Obligation to notify the competent authority of any changes in the operation of an installation	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. ***Article 2.1(1)(e)(2) WABO***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. Acting contrary to the requirements for a permit (Article 2.1(e) WABO), the WED applies through Article 1a (1). ***Article 2.1(1)(e)(2) WABO***	Article 6 WED establishes the height of the fines/ years in prison (see obligation 1 above)
Obligation to comply with the conditions set in the permit or mandatory ELVs	Article 5.3 of the BOR requires that activities covered by Article 2.1(e) WABO make use of the BAT. According to Article 5.4 BOR, the competent authority sets the BAT, including the nature, effects and volume of the emissions (5.4(1)(f) BOR). Article 5.5 BOR requires instructions on emissions limits for installations referred to in Article 2.1(1)(e) WABO. Annex I to the MOR lists BAT documents that are relevant for IPPC installations. A failure to comply with these requirements *may be considered* an offence (see introduction). ***Article 2.1(e) WABO, Article 5.5 BOR***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	N/A	N/A

*ELVs: Emission Limit Values

Table 99.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in The Netherlands*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	According to Article 2 of the Solvent Decree, the Decree applies to installations that require a permit (Annex I, C BOR). In general, obligations to apply for an environmental permit can be found in Article 2.1(e) WABO and Article 2.1(2) BOR (installation for which a permit is required) (Annex I, C BOR). A failure to comply with these requirements *may be considered* an offence (see introduction). ***Article 2.1(1)(e) WABO and Article 2.1(2) BOR)***	Chapter 5 of WABO regulates administrative enforcement. According to Article 5.19 WABO, the competent authority may withdraw, fully or partially, the permit or exemption if: a. the permit or exemption was issued due to an incorrect or incomplete information; b. non-compliance with permit or exemption; c. non compliance with the regulations connected to the permit or exemption; d. the holder of the permit or exemption, does not respect general rules. On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanction (see introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	According to Article 2 of the Solvent Decree, the Decree applies to installations that require a permit (Annex I, C BOR). In general, obligations to apply for a permit can be found in Article 2.1(1)(e) WABO. A failure to comply with these requirements *may be considered* an offence. Non-compliance with Article 2.1(e) WABO is listed as an economic offence (*delict*) by Article 1a(1) of the WED. ***Article 2.1(1)(e) WABO***	Article 6 WED establishes the height of the fines/ years in prison. Article 6(1)(1) states *offences,* mentioned in Article 1(1) and/or 1a(1), a can be punished with one year imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000 (as at 01-01-2010). For other offences, the punishment can be imprisonment with a maximum of six months, community service or a fine of the fourth category, which can be up to Euros 19,000 (as at 01-01-2010). Article 6(1)(1) states that *crimes*, mentioned in Article 1(1) and/or 1a(1), are punished with six years imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000. For other crimes, the punishment can be imprisonment with a maximum of two years, community service or a fine of the fourth category, which can be up to Euros 19,000. ***Article 6(1)(1) WED***
Obligation to supply information for application for permits	<u>Infringement or non-compliance with the following requirement:</u> Obligation of the applicant to provide the necessary information. *Article 4.4 BOR* ***[Chapter 5 of WABO on enforcement***			

	sets sanction for non-compliance with implementing decrees eg BOR – see introduction]			
Obligation to notify the competent authority of any changes in the operation of an installation	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. ***Article 2.1(1)(e)(2) WABO***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. Acting contrary to the requirements for a permit (Article 2.1(e) WABO), the WED applies through Article 1a (1). ***Article 2.1(1)(e)(2)WABO***	Article 6 WED establishes the height of the fines/ years in prison (see obligation 1 above)
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	Article 3 of the Solvent Decree requires that the installation fulfils the emission requirements that are set out in Annex IIA to the Decree. Control of emission values by the operator is required by Article 10 of the Solvent Decree. In addition, Article 11 requires the operator to maintain registers of solvents in which it can show the competent authority that they complied with the emission limits for waste gases, diffusive emissions and the total emission limit values (ELVs). A failure to comply with these requirements can be considered an offence (see introduction). ***Article 3a and Annex IIA Solvent Decree***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	N/A	N/A

Table 2.100 *Directive 2001/80/EC (LCP Directive)***:** *types of offences and related administrative and criminal penalties in The Netherlands*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	According to Article 1(b) BEES, the Decree applies to installations as mentioned in Annex I, C, BOR. In general, obligations to apply for an environmental permit can be found in Article 2.1(e) WABO (and Article 2.1(2) BOR (installation for which a permit is required) (Annex I, C BOR). A failure to comply with these requirements *may be considered* an offence (see introduction). ***Article 2.1(e) WABO and Article 2.1(2) BOR)***	Chapter 5 of WABO regulates administrative enforcement. According to Article 5.19 WABO, the competent authority may withdraw, fully or partially, the permit or exemption if: a. the permit or exemption was issued due to an incorrect or incomplete information; b. non-compliance with permit or exemption; c. non compliance with the regulations connected to the permit or exemption; d. the holder of the permit or exemption, does not respect general rules. On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanction (see introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	According to Article 1.2 BEES Decree, the decree applies to combustion plants forming part of a installation which belongs to one or more of the categories of installations listed in Annex I WABO. In general, obligations to apply for an environmental permit can be found in ***Article 2.1(1)(e) WABO.*** A failure to comply with these requirements *can be considered* an offence. Non-compliance with Article 2.1(1)(e) WABO is listed as an economic offence (*delict*) by Article 1a(1) WED. ***Article 2.1 WABO***	Article 6 WED establishes the height of the fines/ years in prison. Article 6(1)(1) states *offences,* mentioned in Article 1(1) and/or 1a(1), a can be punished with one year imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000 (as at 01-01-2010). For other offences, the punishment can be imprisonment with a maximum of six months, community service or a fine of the fourth category, which can be up to Euros 19,000 Article 6(1)(1) states that *crimes*, mentioned in Article 1(1) and/or 1a(1), are punished with six years imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000 (as at 01-01-2010). For other crimes, the punishment can be imprisonment with a maximum of two years, community service or a fine of the fourth category, which can be up to Euros 19,000 ***Article 6(1)(1) WED***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. A failure to comply with these	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction).	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. Acting contrary to the requirements for	Article 6 WED establishes the height of the fines/ years in prison (see obligation 1 above)

installation	requirements *may be considered* an offence (see introduction). ***Article 2.1(e)(2) WABO***	***Article 5.19 WABO and Article 5:1(3) AWB***	a permit (Article 2.1(e) WABO), the WED applies through Article 1a (1). ***Article 2.1(1)(e)(2)WABO***	
Obligation to comply with the conditions set in the permit or mandatory ELVs	Chapter 2, BEES establishes emission values for both new and existing installations. ***Article 11, 12 ,13 BEES*** ***[Chapter 5 of WABO on enforcement sets sanction for non-compliance with implementing decrees eg BEES– see introduction]***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	N/A	N/A

Table 2.101 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in the Netherlands*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	In general, obligations to apply for an environmental permit can be found in Article 2.1(1)(e) WABO ; Article 2.1 BOR (Annex 1B BOR) A failure to comply with these requirements *may be considered* an offence. (see introduction). ***Article 2.1(1)(e) WABO; Article 2.1 BOR*** Article 8 of the BVA (Decree on waste incineration) lists further requirements provided by the permit	Chapter 5 of WABO regulates administrative enforcement. According to Article 5.19 WABO, the competent authority may withdraw, fully or partially, the permit or exemption if: a. the permit or exemption was issued due to an incorrect or incomplete information; b. non-compliance with permit or exemption; c. non compliance with the regulations connected to the permit or exemption; d. the holder of the permit or exemption, does not respect general rules. On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanction (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	In general, obligations to apply for an environmental permit can be found in Article 2.1(1)(e) WABO; Article 2.1 BOR. A failure to comply with these requirements can be considered an offence. Non-compliance with Article 2.1(1)(e) WABO is listed as an economic offence (*delict*) by Article 1a(1) WED. ***Article 2.1(1)(e) WABO***	Article 6 WED establishes the height of the fines/ years in prison. Article 6(1)(1) states *offences,* mentioned in Article 1(1) and/or 1a(1), a can be punished with one year imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000 (per 01-01-2010). For other offences, the punishment can be imprisonment with a maximum of six months, community service or a fine of the fourth category, which can be up to Euros 19,000. Article 6(1)(1) states that *crimes*, mentioned in Article 1(1) and/or 1a(1), are punished with six years imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000 (per 01-01-2010). For other crimes, the punishment can be imprisonment with a maximum of two years, community service or a fine of the fourth category, which can be up to Euros 19,000 . ***Article 6(1)(1) WED***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. A failure to comply with these requirements *may be considered* an offence. (see introduction).	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	Art. 2.1(1)(e)(2) requires a permit to change the installation or its operation. Acting contrary to the requirements for a permit (Article 2.1(e) WABO), the WED applies through Article 1a (1).	Article 6 WED establishes the height of the fines/ years in prison (see obligation 1 above)

	Article 2.1(1)(e) WABO		***Article 2.1(1)(e)(2) WABO***	
Obligation to comply with the conditions set in the permits or mandatory ELVs	Infringement or non-compliance with the following requirement: The Annex to the BVA sets out emission limits, ***Annex to BVA*** ***[Chapter 5 of WABO on enforcement sets sanction for non-compliance with implementing decrees eg BVA – see introduction]***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5:1(3) AWB***	N/A	N/A

Annex XXVII- United Kingdom

UNITED KINGDOM

1. Overview of penalties related to legislation on industrial installations

In the UK, The Environmental Permitting (England and Wales) Regulations 2010 ("The Regulations") cover the legal obligations and penalties in relation to the four Directives on industrial installations.

The Regulations require the regulator to ensure compliance with the relevant provisions of each Directive. The methods available to the regulator to ensure compliance, along with the offences and penalties applicable for non-compliance, are the same for all four Directives. Pursuant to the Regulations, the "operator" is liable for any breach of the relevant provision. "Operator" may include any person (natural or legal).

Administrative sanctions as defined in the continental law system do not exist in the United Kingdom.

Persons who infringe their obligations in respect of industrial installations in the UK can be convicted on summary conviction (petty offences) or on conviction of indictment (serious offences) depending on the type and level of the infringement. A person found guilty is liable on summary conviction to a fine not exceeding £50,000 (Euros 59,772) and/or imprisonment not exceeding 12 months. A conviction on indictment carries an unlimited fine and/or imprisonment not exceeding 5 years.

The UK Regulations provide for the Regulator to ensure that every application for the grant of an environmental permit includes the information specified in the relevant Directive. It also states the specific provisions of the Directive with which the Regulator must ensure compliance when it is exercising its functions in relation to permits. Note that the Regulation makes no specific reference to existing installations, but rather the requirement for an environmental permit applies to all relevant installations defined under the Regulation.

The UK Regulations set out the relevant functions of the competent authorities in relation to regulated facilities covered by the four Directives. The competent authority is either the Environment Agency or the local authority. Relevant functions include determining applications for the granting of environmental permits, and exercising specific enforcement powers to ensure compliance with the Directive.

Under the UK legislation, the regulator must periodically review the operator's permit and make periodic inspections of regulated facilities. The regulator has three main powers in relation to enforcement. Firstly, if an operator contravenes, or is likely to contravene a permit condition, the regulator may serve them with an enforcement notice specifying the steps that must be taken to remedy/prevent the contravention or to ensure that it does not occur. Secondly, if a regulated facility under a permit involves a risk of serious pollution, the regulator may serve a suspension notice. Thirdly, the regulator may also serve a prohibition notice on a person carrying on or proposing to carry on an activity which might lead to a relevant discharge into groundwater. Failure to comply with the requirements of any of these notices constitutes an offence under the UK legislation.

In July 2010, DEFRA (the Department for the Environment, Food and Rural Affairs) carried out a 12 week consultation considering proposed changes to the current UK Regulations. The proposed changes include the introduction of new "civil sanction" enforcement powers for the Environment Agency in the form of Fixed Monetary Penalties (FMP), Variable Monetary Penalties (VMP), and Enforcement Undertakings (EU) as alternatives to criminal sanctions for less serious offences. The proposed changes are intended to take effect from April 2011.

2. Review of offences and sanctions

a) Enforceable provisions covered by penalties in the UK

The table below has been compiled on the basis of the requirements set up by the national legislation. This table indicates briefly which articles for each of the four Directives are covered by the national legislation.

Provisions which set up sanctions that are very general and not related to infringements of provisions in respect of each Directive are not included in the tables but are described in the Introduction. This would be the case, for example, where there is a provision in the criminal code which imposes sanctions for pollution of the environment.

Note that it is not possible under this project to carry out a full conformity check to verify that all relevant obligations have been correctly and fully transposed. Therefore we have not always systematically checked provision by provision. When there is a catch-all provision that covers any infringement to the transposing legislation, (that is a provision in the transposing legislation or in framework legislation (e.g. law on environment or administrative/criminal code), which sets up a specific penalty applicable to any infringement of the transposing legislation for the relevant Directive(s)), we have included a "C" in the row 'catch-all'. When a given obligation has not been transposed, the relevant row in the table will include a "–", hence there is no sanction applicable. An "X" means that a given obligation is covered by a specific provision.

Article	UK
IPPC Directive	
Catch-all	
4	X
5	-
6	X
12 (1)	X
12 (2)	X
14 (a)	-
14 (b)	X
14 (c)	-
VOC Directive	
Catch-all	
3(2)	X
4	X
5 (2)(a)	X
5 (2)(b)	X
5 (4)	X
5 (5)	X
5 (6)	X
5 (8)	X
5 (9)	X
5 (10)	X
9 (1)	X
10 (a)	X
LCP Directive	
Catch-all	
4 (1)	X
4 (2)	X
4 (4)	-
5	X
7 (1)	X
9	X

10	X
13	X
WID Directive	
Catch-all	
4 (1)	X
4 (2)	X
4 (8)	X
5 (1)	X
5 (2), (3) & (4)	X
6	X
7	X
8 (1)	X
8 (4)	X
8 (5)	X
8 (7)	X
9	X
10 (1)	X
10 (2)	X
11	X
12 (2)	X
13 (2)	X
13 (3)	X
13 (4)	X

b) Review of offences and sanctions per Directive

This section gathers information on the offences for each of the four Directives covered by this report and describes the corresponding applicable sanctions (administrative and/or criminal ones) in United Kingdom. We divided the offences into four groups relating to:

- Obligation to apply for a permit for new or existing installations;
- Obligation to supply information for application for permits;
- Obligation to notify the competent authority of any changes in the operation of an installation;
- Obligation to comply with the conditions set in the permit or mandatory ELVs.

In some cases, specific obligations are not covered by the VOC, LCP or WI Directives. In such cases, the corresponding row has been shaded and reference should be made to the provisions applicable to the corresponding infringement under legislation transposing the IPPC Directive. These instances are as follows:

- In relation to the VOC Directive, obligations 2 and 3 are not relevant as there are no such requirements set up under the VOC Directive. These obligations are covered under the IPPC Directive only for relevant plants falling within the scope of the IPPC Directive.
- In relation to the LCP Directive, obligations 1 and 2 are not relevant as there are no such requirements set up under the LCP Directive. These obligations are covered under the IPPC Directive as they fall within the scope of the IPPC Directive.
- In relation to the WI Directive, obligation 3 is not relevant as there is no such requirement set up by the WI Directive. The Directive only defines what is a 'substantial change' in relation to waste incineration plants, but does not require the competent authority to be notified. This obligation is covered under the IPPC Directive.

Table 2.102 *Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in the UK*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	Operating a regulated facility except under and to the extent authorised by the environmental permit, or to knowingly cause or permit the contravention of s12(1). ***Regulation 38(1) Environmental Permitting (England and Wales) Regulations 2010***	A person guilty of an offence under Regulation 38(4) (failure to comply with a notice under Regulation 60(1) requiring the provision of information) is liable: • on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1) Environmental Permitting (England and Wales) Regulations 2010***
Obligation to supply information for application for permits	N/A	N/A	No specific offence for failure to supply information on the application, but the Regulation requires regulator to ensure that application includes the relevant information under the Directive. ***Schedule 7Para 4(1)*** Failure to comply with a notice under Regulation 60(1) requiring the provision of information. ***Regulation 38(4)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	No specific offence for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 7, Paragraph 5(1)*** For example, pursuant to Regulation	No specific penalties for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 7, Paragraph 5(1)*** A person guilty of an offence under

			34, the regulator must periodically review environmental permits and make appropriate periodic inspections. If the regulator considers that the operator has contravened a permit condition, then they may serve an Enforcement Notice. Failure to comply with the requirements of an enforcement notice constitutes an offence. ***Regulation 38(3)***	Regulation 38(3) (failure to comply with the requirements of a notice specified in that Regulation, such as an Enforcement Notice) is liable: • on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A	N/A	Failure to comply with/contravene an environmental permit condition. ***Regulation 38(2)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***

*ELVs: Emission Limit Values

Table 103.2 *Directive 1999/13/EC (VOC Directive): types of offences and related administrative and criminal penalties in the UK*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for an authorisation/ registration for new or existing installations	N/A		Operating a regulated facility except under and to the extent authorised by the environmental permit, or to knowingly cause or permit the contravention of s12(1). ***Regulation 38(1)*** NB For the purposes of the UK legislation, "Authorisation" means environmental permit. ***Schedule 14 Para 2(2) (c)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation				
Obligation to comply with the conditions set in the authorisation/ registration or mandatory ELVs	N/A		Failure to comply with/contravene an environmental permit condition. ***Regulation 38(2)*** NB For the purposes of the UK legislation, "Authorisation" means environmental permit. ***Schedule 14 Para 2(2) (c)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***

Table 2.104 *Directive 2001/80/EC (LCP Directive): types of offences and related administrative and criminal penalties in the UK*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations				
Obligation to supply information for application for permits				
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	No specific offence for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 15 Para 3(1)*** For example, Pursuant to Regulation 34, the regulator must periodically review environmental permits and make appropriate periodic inspections. If the regulator considers that the operator has contravened a permit condition, then they may serve an Enforcement Notice. Failure to comply with the requirements of an enforcement notice constitutes an offence. ***Regulation 38(3)***	No specific penalties for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 15 Para 3(1)*** A person guilty of an offence under Regulation 38(3) (failure to comply with the requirements of any of the above notices) is liable: • on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***

Obligation to comply with the conditions set in the permit or mandatory ELVs	N/A	N/A	Failure to comply with/contravene an environmental permit condition. ***Regulation 38(2)*** NB For the purposes of the UK legislation, "licence" means environmental permit ***Schedule 15 Para 2(2)(e)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***

Table 2.105 *Directive 2000/76/EC (WI Directive): types of offences and related administrative and criminal penalties in the UK*

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	N/A	N/A	Operating a regulated facility except under and to the extent authorised by the environmental permit, or to knowingly cause or permit the contravention of s12(1). ***Regulation 38(1)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to supply information for application for permits	N/A	N/A	No specific offence for failure to supply information on the application, but Regulation requires regulator to require that application includes the information specified in Art 4(2) of the Directive. ***Schedule 13, Paragraph 3*** Failure to comply with a notice under Regulation 60(1) requiring the provision of information**.** ***Regulation 38(4)***	A person guilty of an offence under Regulation 38(4) (failure to comply with a notice under Regulation 60(1) requiring the provision of information) is liable: • on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	No specific offence for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 13, Paragraph 4(1)*** For example, Pursuant to Regulation 34, the regulator must periodically review environmental permits and make appropriate periodic inspections. If the regulator considers that the	No specific penalties for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 13 Para 4(1)*** A person guilty of an offence under Regulation 38(3) (failure to comply with the requirements of any of the above notices) is liable:

			operator has contravened a permit condition, then they may serve an Enforcement Notice. Failure to comply with the requirements of an enforcement notice constitutes an offence. ***Regulation 38(3)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to comply with the conditions set in the permits or mandatory ELVs	N/A	N/A	Failure to comply with/contravene an environmental permit condition. ***Regulation 38(2)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***

Provisions on penalties related to legislation on industrial installations

Document on Good Practices

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milieu
Law & Policy Consulting

Project Management

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Abbreviations

BAT	Best Available Technique
CA	Competent Authority
DEFRA	Department for Environment, Food and Rural Affairs
DKK	Danish Krone
EC	European Community
ECHR	European Court of Human Rights
ELV	Emission Limit Value
EPR	Environmental Permitting Regulations
EU	European Union
EUFJE	European Union Forum of Judges for the Environment
IMPEL	Implementation and Enforcement of Environmental Law
IPPC	Integrated Pollution Prevention and Control
LBRO	Local Better Regulation Office
Ltd.	Limited Company
Opra	Operational Risk Appraisal
ORO	Offence Response Options
Plc.	Public Limited Company
UK	United Kingdom

Document on Good Practices

Introduction

This document is primarily informative. It aims at presenting the enforcement procedures and sanctions in place in Member States for infringement of legislation on industrial emissions, with a focus on legislation transposing the Directive 2008/1/EC concerning integrated pollution prevention and control (the IPPC Directive),[1] and to identify "good practices" in this field. Good practices are to be understood as examples of successful approaches to enforcement. This relates in particular to the different elements of the sanctioning system, both in terms of enforcement procedure and sanctions. Throughout the document, the term "sanction" is used as covering financial and imprisonment penalties but also other measures such as confiscation, closure of an installation used for enforcement purposes. The objective is to support the Member States in implementing their legislation on industrial emissions and in elaborating their own sanctioning strategies. The document also clarifies how Member States interpret the notions of dissuasiveness, proportionality and effectiveness.

In order to ensure operators of the installations covered by this Directive comply with the EU requirements, it is crucial that the national transposing legislation provides adequate enforcement mechanisms, including penalties that are effective, proportionate and dissuasive. The requirement for Member States to determine penalties is explicitly stated in most of the directives related to industrial emission.[2] Although the IPPC Directive does not contain such an explicit provision, Article 14 requires *"Member States to take the necessary measures to ensure that the conditions of the permit are complied with by the operator when operating the installations"*. Article 79 of the new Directive 2010/75/EC on industrial emissions place on Member States an obligation *"to determine penalties applicable to infringements of the national provisions adopted pursuant to this Directive"*. It also prescribes that *"the penalties thus provided for shall be effective, proportionate and dissuasive"*.

The Court of Justice of the European Union has held that although the Treaty leaves Member States to choose the ways and means of ensuring that a directive is implemented, that freedom does not affect the obligation imposed on all Member States to which the directive is addressed, to adopt, in their national legal systems, all the measures necessary to ensure that the directive is fully effective, in accordance with the objective which it pursues.

Furthermore, according to the established case-law of the Court of Justice of the European Union relating to Article 10 EC Treaty, now Article 4(3) of the Treaty on the European Union,[3] whilst the choice of penalties remains within their discretion, Member States must ensure in particular that infringements of EU law are penalised under conditions, both procedural and substantive, which are

[1] Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version). *Official Journal L 024, 29/01/2008 P. 0008 – 0029.*

[2] These are:

- Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, *Official Journal L 85, 29.3.1999.p.1.*
- Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants. *Official Journal L 309, 27/11/2001 P. 0001 – 0021.*
- Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste. *Official Journal L 332 , 28/12/2000 P. 0091 – 0111.*

[3] Article 4(3), second indent, of the Treaty on the European Union reads 'The Member States shall take any appropriate measure, general or particular, to ensure fulfillment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union'.

analogous to those applicable to infringements of national law of a similar nature and importance and which, in any event, make the penalty effective, proportionate and dissuasive.

Penalties are essential tools in the effective enforcement and implementation of EU environmental legislation. The adoption of penalties as an enforcement mechanism for ensuring that this legislation is complied with falls under the competence of the Member States. While all Member States provide for sanctions, generally both administrative and criminal, or, in some cases administrative or criminal, the way in which these are applied varies significantly between Member States, both in terms of the type and range of enforcement mechanism used. In addition, as there is no mandatory level of "minimum" or "maximum" fine to be imposed for non-compliance with a particular legislative provision, there will inevitably be variations between Member States in the different penalties provided for breaches of the legislation transposing the IPPC Directive.

Finally, the enforcement system should be seen as a whole, especially when assessing the effectiveness of sanctions. Factors such as the length of the procedure, interaction between the different competent organisations (inspections, competent authorities, prosecution, judges), should also be considered.

In order to respond to the practical implementation and enforcement challenges posed by the IPPC Directive, a Member State must have in place an effective administrative system and sufficient qualified staff able to:

- Provide information to industrial installations concerning their pollution control obligations and responsibilities
- Carry out permitting of industrial installations (process applications, determine whether suggested industrial pollution control measures are BAT for the particular industrial installation, set permit conditions, ensure public participation)
- Regularly monitor and inspect the industrial installations to see if they are operating in accordance with their permit conditions
- Notify operators of non-compliant industrial facilities of the measures that need to be taken to come into compliance
- Bring enforcement actions when operators do not have permits or fail to comply with the conditions in the permit

Carrying out the above tasks can be quite demanding for an environmental administration, and considerable variations among the Member States in terms of the sophistication and effectiveness of their implementation and enforcement regimes have been identified. The present document focuses on the three last tasks as these are directly relevant in terms of efficiency of the enforcement system in general.

Methodology

The document is the result of a study, which included two main stages. During the first stage, the study focused on overviews of the relevant legislation and procedures for infringement of key enforceable obligations set by of the four Directives regulating emissions from industrial installations, that is in addition to the IPPC Directive, directives relating to large combustion plants, emissions of volatile organic compounds due the use of organic solvent in certain activities and installations and incineration of waste. It covered all the Member States. Some of the conclusions of this comparative overview have been reflected in the present document.

For the second stage of the study, seven Member States were then selected for the purposes of carrying out more detailed reviews of the sanctions and enforcement measures applicable for non-compliance with the IPPC Directive. These particular Member States were chosen to provide a good cross-section view of how penalties are being implemented in practice across all Member States, to ensure a comprehensive geographical coverage of the EU, to obtain a representative sample of the different major legal systems (common law, continental law, administrative (quasi)criminal system), a mixture of founding members and new Member States. The seven Member States are Denmark, France, Germany, Hungary, the Netherlands, Spain and the United Kingdom (with a focus on England and Wales).

Each country study was also supplemented by case studies and interviews with relevant authorities. These case studies were used to illustrate how each country's system operates in practice as well as to determine the extent to which the sanctions imposed for non-compliance were deemed to be effective, proportionate and dissuasive. The detailed country studies are available as separate documents.

A workshop on "provisions on penalties related to legislation on industrial emissions" was held in June 2011 at the Commission premises, with a view to present the preliminary results of the study and discuss the legislation and practice in the Member States. A draft Document on Good Practices, taking into account the results of the discussion held during the workshop, as well as the detailed analysis for Denmark, France, Germany, Hungary, Spain, the Netherlands and UK have been submitted to the members of the Industrial Emission Directive Committee for consultation. The present document also integrates these comments.

The study has shown that, in general, there is a lack of quantitative data. In most Member States, while general statistical information is available on enforcement e.g. data on number of inspectors, number of formal notices, these are not as a rule broken down per type of installations. As a result, in many instances, it is not possible to obtain detailed figures specific to IPPC installations, although such data may be available at the regional level.

The IPPC Directive – main enforceable provisions

The IPPC Directive (2008/1/EC) provides the framework for the other legislation on industrial emissions control. Its objective is to achieve integrated prevention and control of pollution from a wide range of industrial activities covered in Annex I to the Directive. The IPPC Directive applies to around 52,000 industrial installations in the European Union. It covers a wide range of industrial installations such as energy industries, production and processing of metals, mineral industries, chemical industries, and waste management installations.

Under the IPPC Directive, no new industrial and agricultural activities with a high pollution potential listed in Annex I of this directive shall be operated without an environmental permit from the authorities in the respective Member State. The permits are to include measures ensuring that certain

environmental conditions are met (e.g. preventive measures are taken against pollution, no significant pollution is caused, and waste production is avoided).

Only the provisions of the IPPC Directive, which place an obligation on the operator are relevant, as they are enforceable and, as such, their infringement should be identified as an offence and corresponding penalties should be set by the transposing national legislation.

Table 1 below presents the key enforceable provisions of the IPPC Directive which provided the focus for the detailed studies.

Table 1: Key enforceable provisions of the IPPC Directive

Article	Key enforceable provisions
Article 4	No new installation shall be operated without a permit in accordance with the Directive
Article 5	Existing installations shall have permits in accordance with the Directive by 30 October 2007
Article 6	Applications for permits shall contain specific information listed in Article 6 (description of the installation and its activities, the raw and auxiliary materials, other substances and the energy used in or generated by the installation…)
Article 9	Permits shall include emission limit values for polluting substances based on BAT & other appropriate requirements ensuring protection of soil and groundwater, waste management, etc.
Article 12(1)	Operators shall inform the competent authorities of any planned change in the operation.
Article 12(2)	Operators shall request a permit when they are planning substantial changes in their installation
Article 14(a)	Operators shall comply with the conditions of a permit when operating the installation
Article 14(b)	Operators shall regularly inform the competent authority of the results of monitoring of releases
Article 14(c)	Operators shall afford the competent authority all necessary assistance with inspections

The number of relevant obligations is quite large. In order to streamline the analysis and provide a clear and simple comparative framework, all relevant provisions have been grouped under four key obligations to focus the comparison across countries. The following table describes the four key obligations and how each of these link to the relevant provisions of the IPPC.

Table 2: Key obligations and relevant provisions of the IPPC Directive

Key obligation	Relevant provisions in IPPC Directive
Obligation 1: to apply for a permit for existing and new installations	Article 4, Article 5, Article 12(2)
Obligation 2: to supply information for application for permits	Article 6
Obligation 3: to notify the competent authority of any changes in the operation of an installation	Article 12(1), Article 14(b)* * For the part setting a requirement to notify the CA in case of incident or accident significantly affecting the environment
Obligation 4: to comply with the conditions set in the permit or mandatory ELVs	Article 14(a)-(c)

The document structure

The first section of this document briefly presents the overall legal and institutional framework of the selected Member States. In section two, the document introduces and comments upon the notions of effectiveness, proportionality and dissuasiveness of penalties. Section three of the document focuses on sanctions, as they are set in legislation and applied in practice, while section four provides the key elements of the different procedures, which may influence the level of penalties. This section also considers the aspects linked to inspections and to judicial procedures. The last section of the document provides a list of guidelines and guidance documents that the selected Member States have developed to support the different actors of the sanctioning procedures.

The document also contains examples drawn from the country detailed studies and case studies, which present key elements and good practices that ensure effective, proportionate and dissuasive penalties and efficient enforcement systems. These key elements and good practices are structured around the following themes:

1. How the different factors governing the setting of sanctions can concur to the setting of effective, proportionate and dissuasive penalties, presenting in turn:
    - The nature of the sanctions, administrative, administrative (quasi)criminal and criminal, the comparative advantages of these different types of sanctions, along with criteria used to start a criminal procedure and the potential synergies between administrative and criminal sanctions
    - The range of sanctions available to the enforcement bodies, in terms first of penalties *stricto sensus* i.e. fines and imprisonment, but also the arsenal of other remedial measures and/or sanctions, which can be a powerful tool for enforcement.
    - The aggravating or mitigating criteria used when selecting an enforcement measure/sanction or setting a penalty.
    - The importance of publicity
2. What are the most important features which strengthen the enforcement and sanctioning procedure at the inspection stage and during criminal proceedings, paying particular attention to the need for specialisation of and cooperation between the

different actors of the enforcement system, as well as the main conditions to ensure proper public access to justice.

1. The different legal and institutional frameworks

Member States overall legal and institutional frameworks are characterised by a great variety. Similarly, the institutional structure, and in the present case, the authorities competent for the implementation and control over industrial installations, differ significantly from one Member State to another. This section gives an overview of the different legal and institutional frameworks of the seven Member States studied in detail.

1.1. Overall legal framework

One of the selection criteria of the seven Member States considered in this document was to have a good overview of the different types of national legal frameworks and institutional structure, combined with geographical and historical criteria. Table 3 below presents the main differences in terms of:

- overall legal and institutional framework: continental versus common law system with two examples of administrative (quasi)criminal law system, federal versus unitary state, with some countries having extensive devolution of powers to their regions,
- geographical criteria: mix of founding, old and new Member States as well as geographical spread across Europe

Table 3: Overview of key characteristics of the selected Member States

	Legal framework	Geographical, etc.
France	– Continental legal system – Republic – Unitary State	– Founding Member State – Western Europe
Hungary	– Continental legal system, with quasi-criminal sanctions – Republic – Unitary State	– Joined EU in 2004 – 'New' MS – Central and Eastern Europe
Germany	– Continental legal system with administrative (quasi) criminal law system – Federal Republic	– Founding Member State – Western Europe
Netherlands	– Continental legal system – Constitutional Monarchy – Unitary State	– Founding Member State – Western Europe
Spain	– Continental legal system – Constitutional Monarchy – Unitary State, highly decentralised	– Joined EU in 1986 – 'Old' MS – Southern Europe
Denmark	– Continental legal system – Constitutional Monarchy – Unitary State	– Joined EU in 1973 – 'Old' MS – Northern Europe
UK	– Common law system – Monarchic Republic – Unitary State, highly decentralised	– Joined EU in 1973 – 'Old' MS – Western Europe

1.2. Competent Authorities

In most of the EU Member States, regulatory and enforcement competences are divided between a number of different "competent authorities". In several Member States, including Austria, Germany, Belgium and Bulgaria, this involves the division of regulatory functions between authorities at the national/federal level and at regional/state levels. In other countries, such as Denmark and Hungary, the regional authorities exercise the major control functions over industrial installations. In the Czech Republic, the Netherlands, UK and Ireland, regulatory functions are also carried out at the municipal/local authority level.

Table 4: Competent Authorities in the seven selected Member States

Country	Competent Authorities
France	– Departmental préfets (government representatives in districts)
Hungary	– National and regional level: Ministry of Rural Development and Inspectorate for Environment, Nature and Water (10 regions)
Germany	– Länder level
Netherlands	– Multiplicity of CAs, at central and provincial levels but mainly provinces
Spain	– Autonomous communities
Denmark	– Municipalities, decentralised units of the Environmental Protection Agencies for larger and/or most polluting installations and state regional authorities for polluted soils
UK	– the Environment Agency in England and the Environment Agency Wales in Wales

2. Effectiveness, proportionality and dissuasiveness

The criteria of effectiveness, proportionality and dissuasiveness are still vague notions. They are not defined by EU legislation and the case law of the Court of Justice of the European Union is rather limited on this topic. The "founding" case is the Greek Maize Case[4] where the Court ruled that while the choice of penalties remains within their discretion, Member States must ensure that infringements are penalised under conditions, both procedural and substantive, which, in any case, make the penalty effective, proportionate and dissuasive.

With regard to the principle of proportionality, the Court has consistently held that, in order to establish whether a provision of EU law complies with the principle of proportionality, it must be ascertained whether the means which it employs are suitable for the purpose of achieving the desired objective and whether they do not go beyond what is necessary to achieve it.[5]

In another case, the Court specified the notion of dissuasiveness looking specifically at the procedural aspects rather than the penalty itself.[6] The Court recalled that a limited number of sanctioning procedures have been initiated, some of them more than a year after the date of control. It also highlighted that some of the infringement procedures were subject to an administrative decision more than two years after this date. The Court considered the time elapsed between the date of control and the initiating of the sanctioning procedure as well as between the date of control and the date at which an administrative decision has been taken. Considering the dissuasive nature of the sanctions, the Court specifically looked at the number of fines which were actually paid. The absence of payment in several cases was due to the fact that no constraint measure was taken. In other instances, the procedure has been suspended by appeal procedure. On these grounds, the Court ruled that Spain failed to impose penalties which have a deterrent effect on those responsible for infringing EU law provisions.

Based on literature and case law, the three criteria can be defined as follows.

Effectiveness: penalties are capable of ensuring compliance with EU law and achieving the desired objective

Proportionality: penalties adequately reflect the gravity of the violation and do not go beyond what is necessary to achieve the desired objective

Dissuasiveness: penalties have a deterrent effect on the offender which should be prevented from repeating the offence and on the other potential offenders to commit the said offence.

However, these definitions raise some challenges. Firstly, these criteria are closely inter-linked in the sense that, for example, a sanction can be seen as effective if it is proportionate and dissuasive. The criteria set by the Court of Justice of the European Union as regard the dissuasiveness of the penalties could also be equally seen as ensuring effectiveness. Besides, the interpretation of the Court focuses on proportionality in the context of immediate sanctions. According to the Court case-law, the necessity element of the sanction needs to be assessed while also deciding on the proportionality of

[4] Case C-68/88 Greek Maize Case
[5] Case C-94/05 Emsland-Stärke; Case C-426/93 Germany v Council; and Case C-26/00 Netherlands v Commission.
[6] Case C-189/07 Commission v Kingdom of Spain

immediate sanctions. When it comes to punitive sanctions, the link between necessity and proportionality is not clear. In other words, the punitive element of the sanction, which demonstrates the social disapproval, may lead to a more stringent sanction than what the sanction would be only based on the proportionality criteria. Effectiveness can be differentiated from dissuasiveness in the sense that the effectiveness of sanctions relates primarily to the short-term i.e. to meet the objectives of the legislation and ensure compliance with regard to the current behaviour of the operator (restoration of harm), whereas dissuasiveness criteria relates to the future (prevention of future harm).

Secondly, the application of the criteria should be guided by the specific circumstances of individual cases and be seen as part of a broader context. Typically, many cases of infringement are solved without imposition of penalties as such, but up-front in the procedure, through discussion and negotiation between the operator and the inspector and/or administrative authority. Each case is unique and a key principle is to take into account the particularities of individual cases e.g. the ability of the offender to pay. Looking at the broader context is important as, for example, lengthy and costly litigations could be more dissuasive for companies than the specific sanctions imposed. The risk to be detected and the likelihood that prosecution will take place are very much a question of capacity and are important to ensure dissuasiveness. In other words, the question of the effectiveness, proportionality and dissuasiveness of penalties should be considered together with the assessment of the national enforcement systems.

Thirdly, there is a lack of empirical and evidential analysis of the penalties as applied in practice. For example, dissuasiveness is hard to measure. The fines imposed in cases related to air emissions are often far below those usually set in the field of competition law, making often difficult to judge the effective, proportionate and dissuasive character of the sanctions imposed.

These challenges are further complicated by the significant differences between the national legal and institutional frameworks and practices, as well as in the economic situation of each of the 27 Member State. These differences across Member States explain that it is not feasible to define common ideal solutions, which could apply to all. This is why this document presents examples of good practices, both substantive and procedural features of the national sanctioning systems as they are implemented in practice, in order to support the Member States in their responsibilities to ensure enforcement of the EU requirements on industrial emissions. However, the specificities of each Member State should be always taken into account, and the document does not pretend to set best practices that could be implemented directly in any Member State.

Keeping this consideration in mind, as per the following box, some elements can be linked to each of the three criteria applicable to penalties, although it should be noted that some of them could relate to more than one criterion.

Proportionate

- Proportionality of the sanction to the seriousness of the offence
- Proportionality of the sanction to the damage caused and/or the illegal revenues obtained
- Consideration of the circumstances of particular situation e.g. the size of the installation

Effective

- Ensuring that the objective set by the law is achieved
- Ensuring that the procedure is not overly long and costly

- Existence of coercive measures, possibility to proceed with remediation measures immediately at the operator's expenses
- Range and type of measures available, possibility to combine different measures (administrative measures and sanctions)
- Ensuring cooperation between different actors of the sanctioning procedure and their specialisation

Dissuasive

- Penalties sufficiently severe to punish the offenders and ensure a deterrent effect
- Higher penalties in case of recidivism, aggravating circumstances
- Importance of publicity to enhance the deterrent effect of the penalty

3. The sanctioning system

This part focuses on sanctions, as they are set in legislation and applied in practice.

3.1. The nature of the sanctions

The description of the nature of sanctions applicable to infringement of legislation on industrial emissions involves looking at the branch of law under which the sanctions are set, administrative or criminal, and how the two systems interact.

3.1.1. Administrative versus criminal sanctions

With regard to the imposition of administrative or criminal penalties, previous studies[7] indicated that while in some countries, administrative sanctions are considered to have the same repressive and preventive character as criminal ones, in certain regimes there is a substantial distinction between administrative and criminal sanctions. For the latter, there is no social blame in the administrative sanction; rather, the only intention is to re-establish the public order. The body imposing the sanction and the proceedings to impose the sanction in many countries will be a clear tool to differentiate between both types of measures. In most cases, an administrative body will be responsible for imposing administrative measures whereas a criminal court will be in charge of imposing criminal measures. The proceedings to impose the sanctions are also different. Except in common law countries where there is usually not a specific and differentiate procedure to impose administrative sanctions, an administrative sanction will be imposed through an administrative procedure whereas the criminal sanction will be imposed through a criminal procedure.

Not all EU Member States have specific provisions for both administrative and criminal sanctions relating to industrial installations. Unlike the continental legal systems which exist in most EU countries, several common law countries, or countries with a common law influence, including Ireland, Cyprus and Malta have no administrative sanctions in place for offences.

However, the introduction of administrative sanctions in the UK suggests that these are an efficient instrument for enforcement. Until recently, the UK had no specific provision for administrative sanctions. However, new legislation was introduced in 2010 allowing administrative sanctions to be applied to a limited number of environmental offences.[8] These sanctions are known as "civil sanctions" and can be used against a business committing certain environmental offences, as an alternative to prosecution and criminal penalties of fines and imprisonment. However, civil sanctions do not currently extend to those breaches of legislation in respect of industrial installations. It is expected that these sanctioning powers should be extended to industrial installations in the near future.

As explained below, the reviews carried out prior to the adoption of the new legislation concluded that administrative penalties are an effective way of ensuring regulatory compliance whilst reserving criminal prosecutions for the most serious of cases of regulatory non-compliance.

[7] See for instance Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member States, Milieu, 2003 http://ec.europa.eu/environment/legal/crime/pdf/ms_summary_report.pdf

[8] The Environmental Civil Sanctions (England) Order 2010 and the Environmental Sanctions (Miscellaneous Amendments) (England) Regulations 2010

The role of administrative sanctions alongside criminal ones

In 2005, a report by Sir Philip Hampton set out principles for better regulation.[9] The report concluded that sanctions were not a deterrent to serious non-compliance and proposed a review of penalty regimes, which was subsequently carried out by Professor Richard Macrory in 2006. The resulting report, "Regulatory Justice: Making Sanctions Effective" concluded that the existing system was too heavily reliant on criminal prosecutions which were not always a proportionate response to the seriousness of the offence, stating:

> *Criminal prosecutions remain the primary formal sanction available to most regulators. While this sanction is appropriate in many cases, the time, expense, moral condemnation and criminal record involved may not be appropriate for all breaches of regulatory obligations and is burdensome to both the regulator and business. While the most serious offences merit criminal prosecution, it may not be an appropriate route in achieving a change in behavior and improving outcomes for a large number of businesses where the non-compliance is not truly criminal in its intention.*

The report recommended a broad "toolkit" of civil sanctions for regulators to promote and enforce regulatory compliance. Among its recommendations included the extension of flexible administrative monetary sanctions and the strengthening of statutory notices to work alongside the criminal law in combating non-compliance. It was believed that such regulatory sanctions would provide a more flexible and proportionate approach to non-compliance and help to resolve many cases more quickly and effectively.

In some countries, there is no specific criminal sanction for the particular offences covered by the study (see introduction). However, in most of these cases, general criminal sanctions are provided for by a criminal code or framework environmental law and as a rule, would apply. In such instances, the sanction is often conditional upon the existence of damage to the environment (Czech Republic, Latvia, Lithuania, Slovenia and Spain). Where specific criminal sanctions are set for particular offences, general criminal sanctions as described above also apply.

In Germany and Hungary, administrative (quasi)criminal sanctions operate along administrative and criminal ones. In both countries, these give the possibility to impose financial penalties on offenders through a more simple procedure than the criminal one. They bear a punitive function.

Hungary sets quasi-criminal sanctions in addition to administrative and criminal sanctions. Such sanctions are generally applicable to less serious offences (i.e. petty offences). The main objective is to ensure a quicker punishment of offences which are considered as less harmful than those covered by the criminal code. Administrative (quasi) criminal sanctions carry similar penalties to criminal sanctions i.e. fines or imprisonment. However, they are less stringent in nature and involve a simplified procedure. At first instance they are handled by the administrative authorities rather than by the judicial system. In Hungary, only natural persons may be subject to such proceedings.

In Germany, administrative (quasi) criminal sanctions are used instead of administrative sanctions. Such administrative (quasi) criminal sanctions are known as "administrative criminal" and are established as an alternative method of enforcement, sitting alongside criminal sanctions and

[9] Philip Hampton, "Reducing administrative burdens: effective inspection and enforcement". This document sets out the Hampton principles of effective inspection and enforcement

administrative enforcement measures. The use of such sanctions is conditional upon the offender's negligence or intent. The aim of such sanctions is not to restore legality or to prevent danger but to have a punitive, deterrent and preventive effect by imposing convictions on the offender for a wrongdoing.

The benefits and disadvantages of imposing administrative, administrative (quasi) criminal and/or criminal sanctions can be summarised as follows.

	Administrative sanctions	**Administrative (quasi) criminal sanctions**	**Criminal sanctions**
Advantages	• Communication with the perpetrator (e.g. a warning letter could be enough to force the operator to comply with its legal obligations) • Fines can be even higher than through criminal proceedings	• Simplified and quicker procedures compared to criminal procedures • Tool with which to punish (dissuasive sanction)	• Strong tool with which to punish (dissuasive sanction), • Allows the victim to be compensated, • Public procedures (shaming effect), • Significant powers of prosecutor and the investigating bodies • Guarantee of impartiality
Disadvantages	• Lack of publicity • Sometimes too much room for bargaining	• Lack of publicity • In some countries, legal persons are not subject to quasi-criminal liability	• Lengthy procedures • Resource consuming

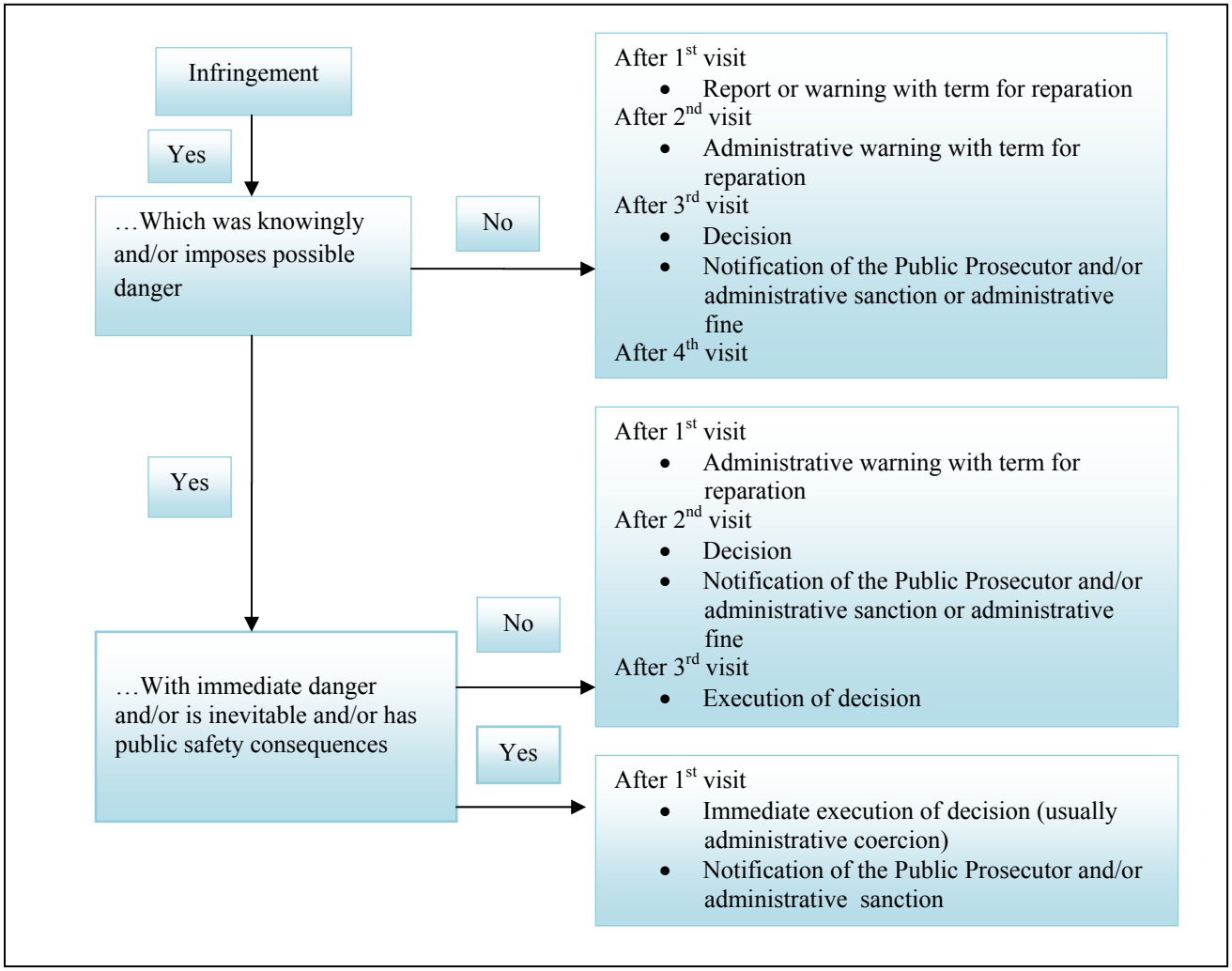
The choice between an administrative or a criminal sanction also depends on the objective of the sanction. For example, under the England and Wales Environment Agency outcomes-focused enforcement policy, criminal sanctions are more geared towards dissuasive effect. The outcomes of the Agency's enforcement policy are:

(1) stopping the illegal activity,
(2) bringing the offender under regulatory control,
(3) restoring and remediating the environmental damage, and,
(4) punishing and/or deterring future offending.

While outcomes (1)–(3) are enforced by administrative mechanisms, type (4) outcomes are enforced via administrative (quasi) criminal and/or criminal sanctions.

Finally, the inspection and enforcement strategy of the Province of Overijssel in the Netherlands gives a good example of the criteria and considerations upon which to impose administrative measures and sanctions or criminal ones, and this throughout the different stages of the enforcement procedure.

Figure 1 Inspection and enforcement strategy of the province of Overijssel[10]



3.1.2. Criteria for starting a criminal procedure

One of the main measures the competent authority and/or the inspectorate can undertake is to report the infringement to the public prosecutors. This is an important aspect of the sanctioning procedure as it is the initial phase which can ultimately lead to a criminal sanction, rather than to an administrative one.

The action to report the infringement can be subject to conditions, sometimes linked to practice. For example, in France, the practice is that formal records of infringements to the legislation on classified installations are only submitted to the prosecutor when there is a potential threat to health and the environment. In other words, prosecution is thought for only with regard to what is considered as a serious offence. The Guidelines set by Denmark constitute an interesting example of the setting of such criteria. However, these are not always well followed.

[10]Ferwerda, C., *Handhaven of gedogen, dat is de vraag*, Handhaving 2010, no. 4.

Danish rules governing compulsory report to the prosecution

In Denmark, the supervisory authority shall report the infringement to the public prosecutors in case the administrative sanction has not resulted in the illegal activity being brought under regulatory control. According to the Guidelines on enforcement of the Environmental Protection Act, certain types of infringement would require that the supervisory authority should report the infringement to the police although the administrative sanction has resulted in the illegal activity being brought into compliance with the law. This would be the case where a new IPPC installation is operated without the required permit or and typically in cases where offender acted deliberately or by gross negligence and the infringement resulted in a damage to the environment or risk of a damage, or actual or intended economic advantages.

However, a review of the enforcement of the environmental legislation by the municipalities, the decentralised units of the Environmental Protection Agency and the public prosecution authorities (the police) launched by the Danish Environmental Protection Agency revealed that reporting of violations to the public prosecutions authorities is inadequate. The review showed that there is a tendency not to follow the guidance on when reporting of violations should take place as set out in the Enforcement guidelines issued by the Ministry and that cooperation between the environmental enforcement authorities and the public prosecutions authorities could be enhanced.

Similarly, the Netherlands provide guidance as to when criminal proceedings should be initiated.

The Netherlands: criteria to start criminal proceedings

The guidance document *Instruction on enforcement of environmental law* stresses that, in principle, criminal proceedings will only be initiated in case of a breach of "core provisions" of environmental legislation. Core provisions of industrial emissions legislation are those setting the obligation to have a permit and to comply with the conditions set in the permit. This rule applies except when the Public Prosecutor considers that the behaviour was a) unintended and incidental and did not have major environmental consequences; and ceased immediately after adequate action of the operator (cumulative conditions) or b) if criminal law has no function in the case at hand because *de facto* the administrative measure(s) already constitute a sufficient 'punishment', in light of *ad hoc* or structural agreements between the Public Prosecutors Office and the administration. In principle, where the infringement relates to non-core provisions, no prosecution is to take place, except in cases when the Public Prosecutor finds that special circumstances prevail (for instance relating to a direct substantial threat to the environment or public health) that makes it necessary to prosecute.

The UK has developed a comprehensive system submitting criminal prosecution to strict threshold through the so-called "two stage" test, based on the evidence available and public interest criteria.

Whether to prosecute or not: the two-stage test set by the Code for Crown Prosecutors

When considering prosecution, regulators must have regard to the Code for Crown Prosecutors ("The Code"). The Code provides guidance on the general principles to be applied when

considering prosecutions. Where the regulator decides that a criminal sanction is appropriate it must assess the case in accordance with the requirements of the Code before commencing a prosecution. The Full Code Test has two stages: (i) the evidential stage; followed by (ii) the public interest stage.

For the evidential stage, prosecutors must be satisfied that there is sufficient evidence to provide a realistic prospect of conviction against each suspect on each charge. This will include considering the reliability and admissibility of the evidence.[11] They must also consider what the defence case may be, and how it is likely to affect the prospects of conviction. A case which does not pass the evidential stage must not proceed, no matter how serious or sensitive it may be. Where there is sufficient evidence to justify a prosecution or to offer an out-of-court disposal, prosecutors must go on to consider the second stage, i.e. whether a prosecution is required in the public interest. A number of factors will make a prosecution more likely, for example where a conviction is likely to result in a significant sentence, and where the offence was committed in order to facilitate more serious offending.[12]

Based on these factors as well as its own public interest factors it uses when deciding on the type and severity of sanction, the Environment Agency will make a decision as to whether a prosecution is an appropriate response or whether an alternative to prosecution may be more appropriate. This assessment will include a consideration of factors set out by DEFRA, including those which will tend to suggest that prosecution is the proportionate action.

3.1.3. Synergies between administrative and criminal sanctions

The question of whether or not administrative and criminal sanctions can apply cumulatively should be considered in the light of the principle of *ne bis in idem* as interpreted by the European Court of Human Rights (ECHR) in its Decision Zolotukhin v. Russia.[13] The ECHR recalled that Article 4 of Protocol No. 7 imposed a prohibition on trying or punishing an individual twice in criminal proceedings for the same offence. The Court ruled that, although the proceedings instituted against the applicant were classified as administrative in national law, they amounted to criminal proceedings based on the so-called Engel criteria: the classification of the offence under national law, the nature of the offence and the degree of severity of the penalty by reference to the maximum potential penalty for which the relevant law provides. With regard to the "idem" element, the Court held that "*Article 4 of Protocol No. 7 must be understood as prohibiting the prosecution or trial of a second "offence" in so far as it arises from identical facts or facts which are substantially the same"*.

In Germany for example, the principle of *ne bis in idem* is strictly applied in relation to criminal and administrative criminal offences.

Germany: an example of non-cumulative sanctions

The prosecution of administrative criminal offences and the prosecution of criminal offences are

[11] Code for Crown Prosecutors, pages 7-9
[12] Code for Crown Prosecutors, pages 10-12
[13] *Serguey Zolotukhin v. Russia* [GC] (Application no. 14939/03), 10 February 2009

intertwined. The same behaviour of the perpetrator can only be punished once and accordingly either as a criminal offence or a criminal administrative offence.[14] If the behaviour of the perpetrator meets the conditions of a criminal offence and an administrative criminal offence simultaneously the public prosecution office must prosecute the criminal offence and the competent authority must stop the prosecution of the administrative criminal offence (§ 21(1) Administrative Criminal Offences Act). This is, for example, the case when the operator of an installation for the production of basic organic chemicals runs the installations without a permit.

This case-law would not prevent administrative measures other than pecuniary ones to be applied in conjunction with criminal sanctions to the same offence, at least as long as these administrative measures do not have a punitive character.

Example of cumulative application of administrative 'measures' and criminal sanctions

In Denmark, where there is no administrative financial penalty, the legislation provides for the use of both measures and regulatory guidance advises the use of either and/or both where it is considered proportionate under the circumstances. The way in which the administrative and criminal sanctions are applied and the factors which regulators must take into account when deciding whether or not to prosecute is determined by various guidance documents, including the Environmental Protection Agency's guidelines on enforcement of the Environmental Protection Act and the Instructions from the Director of public prosecutions concerning judicial procedures for environmental infringement. Administrative measures will thus be used with the option to resort to criminal prosecution where operators have breached their permit conditions or where administrative procedures are not complied with.

The application of the ECHR case law would be more problematic in countries where administrative sanctions can have a punitive nature. It could be considered as admissible with some safeguard, notably the total of both fines cannot exceed the potential maximum amount of the criminal fine. An example is France although it does not apply in the case of IPPC penalties given that there are no administrative fines in this instance.

France: cumulative administrative and criminal sanctions

Both administrative and criminal sanctions can apply for the infringement of the legislation on classified installation in France. These sanctions can be imposed separately on the offender and even be cumulative. For instance the non-respect of the requirement set in the letter of formal notice issued by the prefect to close an installation or suspend its activity can both lead to an administrative sanction and a criminal sanction. The Constitutional Council considers that the rule of *non bis in idem* does not prohibit the combination of criminal and administrative sanctions incurred for the same facts since these sanctions do not have the same purpose and the interests they aim to safeguard are not identical. The Constitutional Council, however, provides that administrative and criminal sanctions when applied cumulatively shall be subject to the principle of proportionality. In particular, the total amount of administrative fines and criminal fines issued for the same facts shall not exceed the highest amount possible between these two

[14] In favour of this: Jarass/Pieroth, Legal Commentary to the Basic Law of the Federal Republic of Germany, Article 103, recital 74.

penalties.[15]

3.2. The range of sanctions

All EU Member States set administrative sanctions in case of breaches of IPPC legislation. These include different kinds of measures and sanctions, and, sometimes only financial penalties. With regard to criminal sanctions, all the seven countries studied provide for criminal penalties (fines and imprisonment), with also in some cases the possibility to impose other types of sanctions, such as the dissolution of the company. The following section firstly considers fines and imprisonment penalties both administrative and criminal. Secondly, it focuses on the other types of measures and sanctions that can be taken alongside traditional penalties.

3.2.1. Fines and imprisonment

Tables 6 and 7 present respectively administrative and criminal penalties available in each of the seven Member States studied in more detail. They do not include sanctions other than fines and imprisonment, which are covered in the next section. Table 6 includes administrative fines and specifies when financial sanctions are not provided for by the national administrative legislation for infringement to legislation on industrial emissions. Administrative (quasi) criminal sanctions have been added within Table 7 on criminal penalties for the two countries which provide for such sanctions, Germany and Hungary.

[15] Constitutional Council Decision No ° 89-260 DC of 28 July 1989, § 16-22.

Table 5: Administrative penalties

Countries	Obligation to apply for a permit for new or existing installations	Obligation to supply information for application for permits	Obligation to notify the competent authority of any changes in the operation of an installation	Obligation to comply with the conditions set in the permit or mandatory ELV's
Denmark	No financial sanction	No financial sanction	No financial sanction	No financial sanction
France	No financial sanction	No financial sanction	No financial sanction	No financial sanction
Germany	No financial sanction	The infringement of these obligations does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit	No financial sanction	No financial sanction
Hungary	Having regard to the danger the illegal conduct may have on the environment, fine from Euros 182 to 365/day (HUF 50,000 to 100,000)	No financial sanction	No financial sanction	Fine of Euros 730-1,826 (HUF 200,000 to 500,000)
Spain	In case of serious damage to the environment or serious danger to human health or safety, fine from Euros 200,001 to 2,000,000 If not, fine from Euros 20,001 to 200,000	Serious offences (intentional element): fine from Euros 20,001 to 200,000 If not, fine from Euros up to 20,000	In case of serious damage to the environment or serious danger to human health or safety, fine from Euros 200,001 to 2,000,000 If not, fine from Euros 20,001 to 200,000	In case of serious damage to the environment or serious danger to human health or safety, fine from Euros 200,001 to 2,000,000 If not, fine from Euros 20,001 to 200,000
The Netherlands	No financial sanction	No financial sanction	No financial sanction	No financial sanction
UK	No financial sanction	No financial sanction	No financial sanction	No financial sanction

Table 6: Overview of administrative (quasi) criminal and criminal sanctions

Countries	Obligation to apply for a permit for new or existing installations	Obligation to supply information for application for permits	Obligation to notify the CA of any changes in the operation of an installation	Obligation to comply with the conditions set in the permit or mandatory ELVs
Denmark	Fines: no minima or maxima (Fines typically in the range of DKK 10,000 – 40,000 (app Euros 1,200 - 6,000)) In case of intent or gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator, imprisonment up to two years Same for natural and legal persons but additional financial penalties can apply to legal persons	Fines: no minima or maxima In case of intent or gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator, imprisonment up to two years Same for natural and legal persons but additional financial penalties can apply to legal persons	Fines: no minima or maxima In case of intent or gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator, imprisonment up to two years Same for natural and legal persons but additional financial penalties can apply to legal persons	Fines: no minima or maxima In case of intent or gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator, imprisonment up to two years Same for natural and legal persons but additional financial penalties can apply to legal persons
France	Individuals: - Fine of up to Euros 75,000 - Up to one year imprisonment Legal persons: Fine up to Euros 375,000 (75,000 x 5)	N/A	Individuals: fine up to Euros 1,500 Legal persons: fine up to Euros 7,500	Individuals: - Fine up to Euros 75,000 - Up to six months imprisonment Legal persons: Fine up to Euros 375,000 (75,000 x 5)
Germany	*Administrative (quasi) criminal sanctions:* - In case of intent, fine up to Euros 50,000 - By negligence, fine up to Euros 25,000 Identical fines for legal persons	N/A	*Administrative (quasi) criminal sanctions:* - If intentional, fine up to Euros 10,000 - By negligence, fine up to Euros 5,000 Identical fine for legal persons.	*Administrative (quasi) criminal sanctions:* - In case of intent, fine up to Euros 50,000 - By negligence, fine up to Euros 25,000 Identical fine for legal persons.

Countries	Obligation to apply for a permit for new or existing installations	Obligation to supply information for application for permits	Obligation to notify the CA of any changes in the operation of an installation	Obligation to comply with the conditions set in the permit or mandatory ELVs
	Criminal sanctions: Individuals: - if intentional, imprisonment up to 3 years or fine up to 360 daily units - if by negligence: imprisonment up to 2 years or fine up to 360 daily units *Note: one daily unit amounts from Euro 1 up to Euro 30,000* Legal persons: Fine up to Euros 1,000,000/ if intentional / Euros 500,000 if by negligence.		*Criminal sanctions:* N/A	*Criminal sanctions:* Individuals: - if intentional, imprisonment up to 3 years or fine up to 360 daily units - if by negligence: imprisonment up to 2 years or fine up to 360 daily units *Note: one daily unit amounts from Euro 1 up to Euro 30,000* Legal persons: Fine up to Euros 1,000,000 if intentional / Euros 500,000 if by negligence.
Hungary	*Administrative (*quasi) criminal sanctions: a fine up to 547 Euros (HUF 150,000) No criminal penalties specific to breaches of IPPC legislation General offences *e.g.* 'damaging the environment/the nature', 'illegal deposition of waste', 'danger to the public'. Individuals: - Imprisonment: in average up to 10 years Legal persons: 1) the dissolution of the legal person,	No administrative (quasi) criminal or criminal penalties specific to breaches of IPPC legislation	No administrative (quasi)criminal or criminal penalties specific to breaches of IPPC legislation	*Administrative* (quasi) criminal sanctions: a fine up to 547 Euros (HUF 150,000) No criminal penalties specific to breaches of IPPC legislation General offences *e.g.* 'damaging the environment/the nature', 'illegal deposition of waste', 'danger to the public'. Individuals: - Imprisonment: in average up to 10 years Legal persons: 1) the dissolution of the legal person,

Countries	Obligation to apply for a permit for new or existing installations	Obligation to supply information for application for permits	Obligation to notify the CA of any changes in the operation of an installation	Obligation to comply with the conditions set in the permit or mandatory ELVs
	(2) constraining the activity of the legal person and (3) fines: three times the benefits gained, but minimum EUR 1.862, *The maximum length of imprisonment depends on the offence, the level of guilt and other factors. In some cases the relevant provisions set minima and maxima, whereas in some cases there is only a maximum duration of imprisonment.*			(2) constraining the activity of the legal person and (3) fines: three times the benefits gained, but minimum EUR 1.862, *The maximum length of imprisonment depends on the offence, the level of guilt and other factors. In some cases the relevant provisions set minima and maxima, whereas in some cases there is only a maximum duration of imprisonment.*
Spain	No penalties specific to breaches of IPPC legislation but general crimes against natural resources and the environment - Fines up to Euros 300,000 - Imprisonment up to 4 years	No penalties specific to breaches of IPPC legislation but general crimes against natural resources and the environment - Fines up to Euros 300,000 - Imprisonment up to 4 years	No penalties specific to breaches of IPPC legislation but general crimes against natural resources and the environment - Fines up to Euros 300,000 - Imprisonment up to 4 years	No penalties specific to breaches of IPPC legislation but general crimes against natural resources and the environment - Fines up to Euros 300,000 - Imprisonment up to 4 years
The Netherlands	Offences: - Fine up to Euros 19,000 - Imprisonment up to 6 months or 1 year Crimes: - Fine up to Euros 76,000 - Imprisonment up to 6 years	Offences: - Fine up to Euros 19,000 - Imprisonment up to 6 months or 1 year Crimes: - Fine up to Euros 76,000 - Imprisonment up to 6 years	Offences: - Fine up to Euros 19,000 - Imprisonment up to 6 months or 1 year Crimes: - Fine up to Euros 76,000 - Imprisonment up to 6 years	Offences: - Fine up to Euros 19,000 - Imprisonment up to 6 months or 1 year Crimes: - Fine up to Euros 76,000 - Imprisonment up to 6 years
UK	- on summary conviction to a fine up to £50,000 (Euros 59,772) or imprisonment up to 12 months, or to both; or - on conviction on indictment to a	- on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or	- on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or	- on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or

Countries	Obligation to apply for a permit for new or existing installations	Obligation to supply information for application for permits	Obligation to notify the CA of any changes in the operation of an installation	Obligation to comply with the conditions set in the permit or mandatory ELVs
	fine (no maxima) or imprisonment up to 5 years, or to both	- on conviction on indictment to a fine (no maxima) or imprisonment for a term not exceeding 5 years, or to both	- on conviction on indictment to a fine (no maxima) or imprisonment for a term not exceeding 5 years, or to both	- on conviction on indictment to a fine (no maxima) or imprisonment for a term not exceeding 5 years, or to both

The great variety in the different sanctions in terms not only of level but also in their nature, administrative, administrative criminal or criminal, and other elements as described below show how difficult it would be to determine general "good practices" applicable across countries.

Rare occurrence of financial administrative sanctions

Out of seven countries, only two have set up financial administrative sanctions (fines) for breaches to IPPC legislation, Hungary and Spain. In Hungary, administrative fines are very low (Euros 182 to 365) but this amount is applicable per day, hence can increase with the time. By contrast, Spain has set very high administrative fines – up to Euros 2 millions when the offence had impacted negatively the environment or presented a danger to human health. Otherwise, the maximum is Euros 200,000. Interestingly, the maximum amount of criminal fines is far less high for general crimes against natural resources and the environment, with fines up to Euros 300,000. On the other hand, criminal penalties include imprisonment.

Distinction between minor and serious offences

This is an important feature when considering the requirement to set proportional penalties, as it provides a tool to take into account elements that influence the seriousness of the offence. These can differ from one country to another – depending on the existence of damage to the environment or to human health, based on the intent (and gross negligence in the case of Denmark), as opposed to an offence committed by negligence, or if the offence led to an economic benefit. In the Netherlands, offences are differentiated from more serious 'crimes' to which higher penalties are associated. Other countries set only one maximum for a given offence.

Existence of administrative (quasi) criminal penalties

As mentioned above, two of the Member States studied, Hungary and Germany, use a so-called ":administrative (quasi) criminal" or administrative criminal system. These relate to minor offences while the more serious ones are as a rule handled through criminal proceedings.

Minima and maxima for penalties

The seven Member States studied, follow different approaches to define the level of fines. In some cases, both minima and maxima are defined e.g. administrative sanctions in Hungary and Spain. With regard to criminal sanctions, in all the seven Member States, a maximum is set, with the exception of Denmark which does not set any minima or maxima.

If to take only the maximum fine applicable to breaches of the obligation to comply with the conditions set in the permit or mandatory ELVs in each country, the following variations can be identified.

Table 7: Overview of maximum sanctions

Countries	Specific v. General criminal sanctions[16]	Maximum sanctions
Denmark	Specific	• Fine: no maxima • In case of intent or gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator, imprisonment up to two years • Same for natural and legal persons
France	Specific	• Legal persons: € 375,000 • Natural persons: € 75,000 - 6 months imprisonment
Germany	Specific	• Legal persons: €1 million /500,000 (intentional/negligent) • Natural persons: €10 million (that is 360 daily units at the maximum rate of €30,000 per daily units)* – 2/3 years imprisonment (intentional/negligent)
Hungary	General	• Individuals: Imprisonment: in average up to 10 years** • Legal persons: (1) the dissolution of the legal person, (2) constraining the activity of the legal person and (3) fines: three times the benefits gained, but minimum € 1.862
Spain	General	• € 300,000 • 4 years of imprisonment
The Netherlands	General	• Offences: €19,000 and 6 months to 1 year imprisonment • Crimes: €76,000 and 6 years imprisonment
UK	Specific	• On summary conviction: €59,770 and 12 months imprisonment • On conviction on indictment: no maxima for the fine, 5 years imprisonment

*The amount of €30,000 is theoretical as a number of factors are considered when setting the number and the rate of the daily unit.
** The maximum length of imprisonment depends on the offence, the level of guilt and other factors. In some cases the relevant provisions set minima and maxima, whereas in some cases there is only a maximum duration of imprisonment.

The maximum fine ranges from Euros 1,862 to an unlimited amount, while the maximum imprisonment penalty can be found in Hungary where it reaches 10 years. Taking into account these differences, it should be underlined that, in practice, criminal sanctions appear to be rarely used. In Hungary as a matter of fact, no case of application of criminal sanctions to IPPC installations could be identified. In countries where there have been instances where breaches to legislation transposing the IPPC Directive have been subject to criminal proceedings, when data is available as to the level of sanctions, the financial penalties are rather low compared to the maximum. However, it is not possible to draw meaningful conclusions on the basis of the information available. Comprehensive and detailed studies should be undertaken on a national level, as the setting of low penalties can be justified for a number of reasons linked to the specificities of the cases.

More generally, the question as to whether the prescription of minimum and maximum level of fines is supporting the setting of proportionate, effective and dissuasive penalties or not, can be subject to discussion. Besides, when such minima and maxima are set in legislation, they may not always be adapted to the particular circumstances of the country and each individual case. Some practitioners

[16] The term specific criminal sanction refers to cases where a specific provision is set in the Criminal Code or other criminal law legislation for the breach of IPPC related obligations, whereas the term general criminal sanction refers to cases where a general provision is included in the Criminal Code or other criminal law legislation and has a broader scope than offences to IPPC legislation.

mentioned that while minimum level of fines could be too high and the maximum one too low for certain cases.

Differentiation in the level of fines for natural and legal persons

Table 5 also indicates in which countries criminal sanctions are differentiated for legal and natural persons. In all seven Member States studied, penalties can apply to both natural and legal persons. In some countries, the same penalties apply while in others, the penalties are differentiated, with higher ones potentially applicable to legal persons. In this perspective, due account should be taken of the possibility to impose additional financial penalties to legal persons. For example, in Denmark, fines can be completed with other financial sanctions such as the seizure of the profit made. An example is a ruling by the Eastern High Court where a County was fined DKK 500,000 (approximately Euros 65,000) for failure to comply with the mandatory emission limit values for a waste incineration plant and seizure of the saved amount of DKK 4 million (approximately Euros 350,000), more than five times the amount of the fine itself.

Guidance on the level of fines

In Germany, the practice of developing indicative catalogues of fines can be an interesting example of such guidance. However, on one hand, it raises the question of the necessary flexibility to ensure proportionate, dissuasive and effective penalties. The catalogue actually sets narrower limits to the amount of fines. The recommended levels of fines are adapted in function of the value of the installation itself for construction without permit. On the other hand, there may be many other circumstances to take into account when setting the fines and the fines set by the catalogues are only indicative.

Germany: use of indicative catalogue of fines

The Länders specify the scale of fines by adopting indicative catalogues of fines. According to the catalogue of fines for infringements against environment related provisions of North-Rhine Westphalia (*Bußgeldkatalog Umwelt*) of 2006[17] the scale of fines for the construction of installations (including IPPC) without permit depends on the value of the constructed installation:

Value of the installation	**Fine foreseen**
Less than Euros 50,000	Between Euros 510 and 2,600
Between Euros 50,000 and 500,000	Between Euros 510 and 5,100
Between Euros 500,000 and 5,000,000	Between Euros 2,600 and 25,600
More than 5,000,000	Between Euros 5,100 and 50,000

The catalogue also contains indicative fines for many other infringements.

Similarly, in Denmark, recommendations on minimum level of fines have also been adopted. For example, a fine of at least DKK 50,000 (approximately EUR 2,700) is recommended in case of putting into operation or operating an installation without a permit from the relevant authorities.

[17] The fine catalogue environment of North-Rhine Westphalia of 2006 was established by the Ministry for the Environment, Nature Conservation, Agriculture and Consumer Protection of North-Rhine Westphalia and is available at: http://www.kreisjaegerschaft-coesfeld.de/red/ges-bussgeldkatalog-umwelt-nrw-2010-02-27.pdf

3.2.2. Other measures and/or sanctions

Alongside financial and imprisonment penalties, all Member States provide for other types of measures and/or sanctions. In most cases, such measures/sanctions are the only ones available as part of the administrative proceedings. This is the case when there are no administrative financial penalties for breaches of legislation on industrial emissions, although administrative fines do exist for other environmental offences. In some countries, no administrative fines are available. This was the case in the UK until recently as shown above.

A distinction should be made between administrative measures and administrative sanctions, based on their objective. Typically, national legislation would provide for a range of measures that can be taken by the inspector or the supervisory authority to stop the unlawful behaviour or to remediate the damage caused to the environment or to human health. These would be classified as coercive or remedial measures. In contrast, the administrative sanctions can equate to a punishment of the unlawful behaviour. Sometimes, the same type of measures can be seen as a coercive or a punitive measure. For example, the closure of an installation may aim at preventing further damage while it can also be considered as a punishment, as it is the case in France.

These administrative measures and sanctions are seen as very effective tools to ensure compliance.

The following Table 8 provides some examples of such additional measures and sanctions in the seven selected Member States.

Table 8: Overview of administrative measures and sanctions other than fines

Measure / Country	Restricting/ Limiting the activity, including removal or permanent closure of the installation	Rectification/ imposition of corrective measures on the operator	Seizure of equipment	Publicity	Other
Denmark	Injunctions or prohibitions to prohibit continued operation and to order closure of the facility Imposing more onerous permit conditions, and revocation of permit. May include closure of installation	Issuing an "Order", requiring operator to rectify non-compliance. Injunctions and prohibitions may also be issued to restore site to original position "Self-help actions" (prescription of corrective measures, carried out at offender's expense)			Obtaining financial guarantees from the operator
France	Formal notices which suspend operations until conditions are complied with suspension of operations Closure, removal or sealing of installation	The Court can order that the work to rehabilitate the premises be carried out automatically at the expense of the condemned party			Formal notices may also include conditions requiring money to be deposited, corresponding to the clean-up work required
Germany	Suspension of operations, withdrawal of permit Closure or removal of installation where an installation has been constructed or significantly changed without a permit	Enforcement notices (to restore or remediate harm/damage, remediation notices (to remedy pollution)	Seizure of equipment by environmental inspectors (authority)		
Hungary	Limiting, suspending or prohibiting activities, withdrawal of the permit, variation of permit conditions				Requiring the operator to prepare a programme of measures, or to carry out an environmental review Require the operator to comply with the conditions set in the permit
Spain	Prohibition of activities, revocation or temporal suspension of the authorisation to operate the installation Closure of all or part of the installation	Require offender to restore the damage caused		Publication of sanctions	

The Netherlands	Restorative orders (e.g. to prevent further violation), revocation of permit Removal/demolition of illegal structures	Restorative orders may also be issued to reverse the effects of the offence Administrative coercion (to recover damages caused and to implement obligations if not performed by operator)			Reparations
UK	Enforcement notices (to bring activity under regulatory control), suspension notices (to stop offending), variation notices (to vary a permit), revocation notices (to stop offending), injunctions (to stop a criminal act) and court orders (to stop an activity)	Enforcement notices (to restore or remediate harm/damage, remediation notices (to remedy pollution)	Seizure of equipment by environmental inspectors	Environment Agency press releases	Advice and written warnings

Remedial sanctions other than fines and imprisonment are often seen by practitioners as very effective. The case studies provide two examples of the effective and dissuasive character of such sanctions. They relate to suspension of the activity in France and to administrative orders subject to financial payment in the Netherlands. The latter sanction (in Dutch: "*dwangsom*", which could be translated literally as "coercive sum") is a remedial (reparation) sanction which aims at reversing the effects of the offence. The administrative order describes the remedial action to be taken. The administrative authority shall determine the payment either as a lump sum, or as a sum payable per unit of time in which the order has not been complied with or for each violation of the order. The amounts shall be reasonably proportionate to the gravity of the interest violated and to the intended effect of the penalty. This amount is established by the competent authority. In the Province of Zeeland, internal guidelines are used in order to establish the appropriate amount of the payments. Amongst other things, the profits from non-compliance with the legal obligations are taken into account, as are the frequency of violations, the type of violation and its nature. In 2010, the order prescription was complied with ten times out of the 13 times such order was imposed on companies in the Province of Zeeland.

France: effectiveness of suspension of activity

In one of the case studies identified in France, the supervisory authority (the prefect) imposed a suspension of the activity until the operator regularised the situation. The installation was one of the main treatment centres of household waste in the Aisne Region (a French Region North of Paris). The installation was operating a section of the landfill without authorisation. Beginning of 2006, the Prefect sent a letter of formal notice to the operator with an injunction to regularise its situation. In April 2006, since the operator did not comply with the letter of formal notice, the Prefect decided, as an administrative sanction, to suspend the operation of the section until an authorisation was granted. This administrative sanction was considered very effective as the operator promptly rectified the situation to comply with the law. In this case, the sanctioning administrative procedure was less time consuming and more flexible than the criminal procedure. The criminal sanction was issued after the infringement ended.

Netherlands: effectiveness of administrative order subject to financial payment

Similarly, the imposition of an order subject to financial payment proved to be effective in an instance of non-conformity with the permit conditions in the Netherlands. An inspection revealed that the operator, an industrial waste management firm, was breaching its permit conditions as it repeatedly mixed volatile liquid substances. The provincial authority issued a first warning notifying the company that an administrative order subject to a financial payment might be issued if compliance was not restored. Follow-up inspections showed that the company was still not in compliance almost two years later. The authorities subsequently issued a notification of their intent to issue an administrative order subject to financial payment. The company replied several times and contested the findings of the inspection, but without supplying convincing arguments in the authority's view. As a result, the supervisory authority issued the order, with a financial payment set at Euros 5,000 per infringement with a maximum of Euros 50,000. The first payment was to be made one week after the decision if, at this date, the infringement had not ceased. The company ceased the infringement before this deadline had elapsed. Considering the fact that the company did not agree with the findings of the inspection, the prospect of a fine clearly dissuaded the company from further infringing the permit conditions.

Administrative measures and sanctions, as a rule, are applied in a gradual way. Dialogue with the operator and the use of warnings can be instrumental in stopping the illegal behaviour and avoiding damage to the environment or health, and this without taking further steps.

The operator's willingness to cooperate is, for example, taken into account in France when deciding upon administrative sanctions, such as the suspension of the activity. When the operator does not give any sign of willingness to comply with the warning or letter of formal notice and non-compliance can present a risk to human health and the environment, the supervisory authority is more likely to impose stringent administrative sanctions.

The England and Wales Environmental Agency has formalised such a gradual approach in its enforcement policy.

An example of gradual application of administrative sanctions: UK

The Environment Agency, in the case of minor infringements, will normally apply sanctions in a gradual way, as part of its an "outcome focused" approach to enforcement:

- *Advice and Guidance:* As an initial enforcement measure, the EA will normally provide advice and guidance after the commission of an offence or where an offence is likely to be committed, unless this would have the effect of undermining any enforcement action.
- *Warnings:* A warning or site letter may also be deemed appropriate in response to a minor breach of a condition or where an offence is suspected to have taken place.
- *Other measures:* Where issuing advice and guidance or a warning do not achieve the objective, or in more serious cases, it may be considered more proportionate to consider other measures such as an enforcement notice (to bring an activity under regulatory control).

Similarly, additional criminal sanctions are usually provided for by national legislation. The following box gives an example of those available in France. Some of these additional sanctions can represent a heavy financial burden such as the rehabilitation of the premises.

Criminal sanctions in France other than fines or imprisonment

- The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities;
- The final closure or a suspension of the installation for a period of five years
- The exclusion from public tenders either permanently or for a period of five years;
- Penalty of confiscation
- The posting of the ruling or distribution thereof by the press or by any electronic means to the public

Complementary measures:
- The ban of the use of the facility
- The rehabilitation of the premises

Some countries have developed extensive guidelines on the use of sanctions. A good example can be found in Denmark.

An example of guidelines on application of administrative sanctions: the Danish Guidelines on Enforcement of the Environmental Protection Act

The guidelines on enforcement of the Environmental Protection Act[18] provide practical guidance to the supervisory authorities on the application of administrative sanctions, including preventive and remedial measures available to the supervisory authority to prevent that negative impact on the environment occurs as a result of future operating conditions and enforcement measures to ensure compliance with inter alia legal rules, permits and decisions. It contains some specific examples of injunctions and prohibitions which can be used as templates.

Finally, another very important point made by practitioners is that it is worth considering whether there is the possibility for the courts to confiscate the proceeds of crime. Sanctions themselves are often not enough to remove the financial benefit. The seizure of the profit is seen as an efficient tool which can considerably strengthen the deterrent effect of the sanction.

3.3. Criteria used to determine the severity of the sanctions

As shown above, the legislation itself often distinguishes between minor and serious offences. The main criteria used are whether or not the offence was intentional (or caused by gross negligence), if the offence led to an economic benefit or to damage to the environment or to human health. In Germany for example, aggravated circumstances in terms of damage to the environment are met if the offence resulted in serious and permanent pollution of a river, soil or protected areas, if it endangers the water supply or if endangered species of fauna and flora are permanently damaged. In Hungary, the amount of administrative fines should be adjusted to the severity of the environmental damage caused and the length and periodicity of the illegal conduct.

The main aggravating criteria used in both legislation and in practice can be summarised as follows.

Aggravating criteria

- Potential and/or actual harm to the environment or human health
- The 'mental element': intent or gross negligence
- Foreseeability: When circumstances leading to the offence could reasonably have been foreseen
- Lack of cooperation by the operator with the competent authorities
- Repetitive offences, length of illegal conduct
- Benefits from illegal behaviour (profits made or avoided costs)

The boxes below present examples of the consideration of such aggravating factors by the courts in Hungary and the Netherlands.

[18] It is available on the web site of the Danish EPA. http://www2.mst.dk/udgiv/publikationer/2005/87-7614-833-5/pdf/87-7614-834-3.pdf The title in Danish is " Miljøstyrelsens vejledning nr 6/2005 om vejledning om håndhævelse af miljøbeskyttelsesloven".

Hungary

In Hungary, an IPPC installation carrying out waste treatment activities not in compliance with the conditions of its integrated environmental permits was imposed a fine of approximately Euros 20,800. The fine was confirmed despites several appeals of the operator. In last instance, the Supreme Court ruled that the fine was grounded by the seriousness of the infringement, the fact that the activity caused a risk to the environment and the circumstances of the case, namely the size of the installation.

Netherlands

In the case Corus Stall B.V., the criminal chamber of the District Court of Harlem considered a fine of Euros 12,500 appropriate due to the repetitive character of multiple infringements to the permit conditions and the damage it caused to the environment and danger it presented to human health.

As shown below, the consideration of the economic benefit made out of the infraction can result in a sizeable increase of the penalty and constitute a powerful deterrent for the offender.

Taking into account the economic benefit made out of the infraction in Germany and Spain

Under German legislation, irrespective of some criteria such as the assessment of the severity of the offence, the level of guilt of the offender and his financial situation, administrative criminal fines must be higher than the economic benefit that the offender has occurred, even if it means exceeding the maximum level of fine set in legislation.

In Germany, in a case involving non-compliance of the operator of storage tanks for petroleum products to have the tanks inspected by an audit company, the district government of Cologne imposed a fine of Euros 155,000 taking into account the profit that the company had made by not carrying out the periodic inspections. This is when the North-Rhine Westphalia legislation provides for a maximum of Euros 50,000 for such offence with the possibility to increase the fine on the basis of the economic benefit drawn from the illegal conduct.

The Spanish legislation also provides such a possibility as it prescribes that when the amount of the administrative is lower than the benefit obtained from the infringement, it shall be increased at least up to twice the amount the offender has benefited.

A contrario, several factors can be considered to mitigate the penalty. These have been mainly developed through practice and case law. Some of them such as the cooperative behaviour of the operator mirror the aggravating criteria listed above.

Mitigating criteria

- Concurrent obligations on the operator, resulting from legal or administrative provisions
- Absence of imminent danger to the environment or human health

- Prompt cessation of the offence
- Cooperative behaviour of the operator
- Length of time elapsed since the offence

For instance, in Corus Stall B.V. referred to above, the criminal chamber of the District Court of Harlem reduced the final amount of the fine to Euros 10,000 considering the time elapsed between the occurrence of the offences and the prosecution. Other examples drawn from the case studies show the use of such mitigating criteria by the supervisory authorities and the courts.

Germany: elements taken into account to mitigate the fine

In contrast to the example described in the box above, in another case involving the absence of notification of a non-essential change to an installation, the project manager who failed to notify the competent authority, was sanctioned with a fine of Euros 200. This low fine was considered as proportionate, effective and dissuasive taking into account that the non-essential change was serving safety purposes, that the project manager had admitted the infringement and that the operator of the installation had taken measures to prevent further infringements.

Denmark: absence of imminent danger

A fine of Euros 1,350 was imposed for the accidental discharge of nitric acid and formic acid into a municipal drain and a near-by brook. The Danish Environment Protection Agency did not impose "self-help actions" i.e. corrective measures, which are taken at the offender's expense as there was no imminent serious danger to health and no immediate action was required to prevent the spreading of contamination or pollution.

The two French cases described below show how the use of one criterion "the cessation of the infringement" can lead to over-lenient Court's decision.

France: cessation of infringement, concurrent obligation

In a case dealing with the operation of a household waste treatment facility, an IPPC installation, without permit, the level of the fine was reduced due to the fact that the operator brought its activity in compliance with the law before the end of the criminal procedure. Another element that could have influenced the decision of the Criminal Court to impose a limited fine (Euros 10,000 when the maximum is set at Euros 75,000 by legislation) is the fact that there was an obligation to treat the incoming household waste.

However, in another case, no sanction was imposed by the Criminal Court for operating a facility without an authorisation and not complying with the supervisory authority's (the prefect) letter of formal notice on the ground that the facility was already complying with the legislation on classified installations before the end of the criminal procedure. This can be seen as an overly lenient decision in view of one of the objectives of the criminal sanction, namely to punish illegal behaviour.

Taking into account the length of time elapsed since the offence is not considered as an effective criterion. As a matter of fact, a long delay between the offence and the imposing of a sanction, especially when it involves judiciary proceedings, is often due to deficiencies in the sanctioning procedure and is not the result of a cooperative behaviour of the operator (it can even be the contrary).

Finally, two key elements in establishing seriousness can prove to be difficult to assess, which can hinder the imposition of effective, proportionate and dissuasive sanctions:

- the environmental impacts of the illegal conduct; and
- whether the illegal conduct was committed intentionally, or not.

On one hand, several practitioners emphasized that proving the intent can be more difficult for infringements to industrial emission legislation as administrative authorities often do not have a sufficient level of evidence to judge the above two factors. They have no power of arrest and it is often difficult to convince people involved to be interviewed and to admit their intent. In the UK, the question of intention is crucial in order to judge the severity of the sanctions imposed. For example, the judges would tend not to order the confiscation of benefits if there is no offence.

On the other hand, judging the intention is not always necessary. In Belgium, negligence would provide a sufficient basis for bringing cases before the court. Moreover, in the case of infringement to industrial emission legislation, illegal conduct is usually committed by the operator in the form of negligence or lack of knowledge of the legislation.

How to take into account the revenues of the offender?

Several practitioners have underlined that the size and activity of the installation and its yearly turnover, in other words, its financial capacity should be taken into account. This is primarily linked to the deterrent effect of the sanction. The same level of fine can be negligible for one operator, while substantial for another one. A very high fine may lead to the installation's bankruptcy with a risk that the damage to the environment will not be restored. Similarly, the suspension or prohibition of the installation's operation may lead to its permanent closure. One of the case studies identified in Hungary provides an example of such a risk.

Hungary

A company 'B' Plc. decided to stop its activities of manufacturing and placing on the market of chemical substances and to sublet its site to the company 'F' Ltd., which was to carry out the same activities. The company 'F' Ltd. did not have a valid permit when starting its operation, and this, despites the fact that the installation was warned several times that no IPPC activity could be carried out without an integrated environmental permit. While considering the operator's request to change the name of the installation in the integrated environmental permit that was granted to company 'B' Plc., the regional inspectorate took the decision to prohibit the operation of company 'F' Ltd.

Following the decision of the regional inspectorate the company terminated the sublet and stopped all its activities on the site. According to the regional inspectorate, the decision did not have a deterrent effect. In other words, a sanction cannot be seen as dissuasive, if as its consequence, the operator stops its economic activities on the site.

In contrast, a similar sanction imposed on a foundry producing equipment from recycled metal for rail companies proved to be effective and dissuasive. The suspension of the installation's operation was motivated by non-compliance with the permit conditions, namely exceedance of SO_2 emission limit values and treatment of hazardous waste. Following the decision of the

Inspectorate, the operator installed filtering equipment and cleaned the site from the disposed hazardous waste.

3.4. The importance of publicity

The risk of bad publicity is often mentioned as a key dissuasive element or an aspect contributing to the effectiveness of the penalty.

Denmark: risk of bad publicity seen as a deterrent factor

A fine of only Euros 1,350 was imposed for the accidental discharge of nitric acid and formic acid into a municipal drain and a near-by brook. In that case, the Danish Environment Protection Agency noted that although the fine may not have been dissuasive in itself (it corresponded to approximately 30% of the average monthly salary in Denmark), the risk of bad publicity should a criminal case be opened against the facility had a more deterrent effect than the size of the fine.

France: deterrent effect linked to publicity of a case

In one of the case study, the initiation of a criminal procedure against an installation operating without a permit had a deterrent effect on the other operators of classified installations in the neighbouring area. This is explained by the fact that the case got a lot of publicity due to the notoriety of the operator of the facility.

UK: media coverage and 'name and shame' policy

Similarly, in both case studies identified in the UK, the decision of the Court received media coverage. This was seen as a powerful means of dissuasiveness. The Environment Agency has also a "name and shame" policy. It publicises regularly on its site under the News section, in the so-called "prosecution" theme,[19] penalties imposed in instances of infringement of environmental legislation, including industrial emissions.

The need for more publicity also implies that administrative measures, such as formal records of infringements to the legislation on classified installations, should be publicised. For example, in France, the official records submitted by the inspectors to the public prosecutor are only available on request but are not published on internet or posted in a public place.

The importance of publicity has been recognised by the European Commission, which is trying to raise awareness of industrial cases and push the Member States to make inspection reports publicly available. For instance, it is a legal obligation under Article 23(6) of the Industrial Emissions Directive (2010/75/EU)[20] to make publicly available within 4 months of the site visit taking place, the report drawn by the competent authority describing the findings related to compliance of the installation with permit conditions and conclusions on whether any further action is necessary.

[19] See for example, http://www.environment-agency.gov.uk/news/default.aspx?month=2&year=2010&persona=Prosecution
[20] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions.

In some cases, such publicity, even when combined with relatively low administrative fines, could be more effective than lengthy criminal proceedings. This is to be considered in combination with the lack of information on cases launched and closed and, similarly, on administrative sanctions in general. In this context, data-sharing among Member States should be encouraged.

4. Enforcement and sanctioning procedure

This section focuses on the different key elements of the procedure, which ultimately influence the level of penalties. It considers aspects linked to inspections and to the judicial procedure.

4.1. The inspection

The role and function of inspectors and the methods and procedures which they may employ varies between Member States. In some countries the inspection is one of the functions of the competent authorities e.g. municipalities and provinces in the Netherlands, while *VROM-inspectie*, an inter-administration supervising agency oversees the manner in which the competent authorities implement their permitting and enforcement competences. In France, administrative measures and sanctions are taken by the Prefect (the representative of the central government in the regions and departments). In case of infringement, the inspector issues a formal record, which is sent to the Prefect. The Prefect will then issue a formal notice to the operator to comply with the relevant conditions by a set deadline. If, on expiry of the deadline set for performance, the operator has not complied with the said order, the Prefect may then issue administrative sanctions.

Effective inspection is central to proper enforcement as it is a first step to identify or confirm the existence of an offence. The inspection is also responsible to talk and negotiate with the operator in the first instance.

In most Member States studied, the enforcement powers of inspectors are primarily determined by national legislation, with additional regulatory guidelines providing guidance on the way in which these powers may be implemented.

4.1.1. Frequency of inspections

The frequency of inspections is determined by legislation and/or regulatory procedure and policy. In the UK for example, legislation provides for "periodic" inspections, while the regulatory guidance establishes detailed inspection and audit procedures. Inspection and enforcement procedures may also be determined at regional/federal level, e.g. in the Netherlands where provincial authorities are responsible for deciding on their own "inspection strategies" which determine the frequency of site visits and methods of inspection, including the number of visits per year. In Spain, the frequency of inspections is determined at regional level, and in accordance with annual inspection programmes. In Germany, the federal legislation requires competent authorities of the Länder to monitor compliance of IPPC installations, with a number of Länder setting specific requirements for inspection plans to be established. A number of countries specify a minimum number of inspections in their national legislation, e.g. in Hungary, the legislation provides that administrative authorities carry out site visits on a yearly basis and for environmental audits to be carried out in order to check if the operator is complying with its legal requirements. In Denmark, an agreement between the Minister of Environment and the Local Government Association (the interest group and member authority of Danish municipalities) on minimum frequency for so-called comprehensive inspections with industrial installations sets minimum frequency of inspections, which each municipality is required to meet. In case of non-compliance, discussion and publicity are used as tools to ensure the minimum frequency is met.

Procedures in Denmark to ensure minimum frequency of inspections

If the minimum frequency for inspections is not met, the Ministry of Environment requests the municipality in question to submit in writing an explanation on how the backlog will be overcome and how the municipality will continue to ensure that minimum frequencies are observed. Municipalities which for several years in a row have not completed the minimum of inspections, is summoned to a meeting of the Environmental Protection Agency to discuss the municipality's inspection efforts. Lists of municipalities not having observed the minimum frequency for inspections are available on internet.[21]

In a number of Member States studied, the frequency of inspections is also formally determined by way of on-going assessment and operator performance, with some Member States having specific assessment systems and procedures in place. In Germany, for example, inspections carried out by the competent authorities of the Länder are complemented by self-inspection requirements of the operators and by inspections carried out by private audit companies. The UK also has a self-assessment and scoring system which is used to help determine the frequency of inspections. In the Netherlands, most inspection strategies ensure that on-going perpetrators who commit infringements more than once can expect more visits from the inspecting authorities.

4.1.2. Rights and obligations of the inspectors

In the majority of seven Member States studied, inspections may be carried without notice when it is deemed reasonable to do so, for example on receiving a complaint or where an infringement has occurred or is believed to have occurred. For example, in Denmark, prior notification including information such as the purpose of inspection and the visit time and place is only required if the inspection involves access to buildings or documents. However, it is considered best practice (and in the interests of maintaining good dialogue with businesses) to provide prior notification, unless such notification would be deemed detrimental for the purposes of the inspection. In the UK, regulatory officers responsible for inspecting facilities may carry out such examination and investigations "as may be necessary" under the general environmental law. Such powers must normally be exercised under and in accordance with a written authorisation, except in an emergency where such notice is not required. In Hungary, regional inspectorates may enter an installation without the agreement of the operator where immediate actions are required. However such action may require the approval of the public prosecutor, or the attendance of a police official and witness, unless such approval would cause significant delays.

A number of Member States studied specifically allow for unannounced inspections. In Germany, the laws and regulations in some Länder require a certain number of announced and unannounced inspections. In Spain specific legal requirements for inspectors differ between regions. For example, in Andalucía, inspectors are authorised to access facilities, if necessary without a licence. In Cataluña, inspections can take place at any time, without prior notice.

During inspections, most of the selected Member States, including Germany, UK, Hungary and France, grant inspectors the power to inspect installations and premises, to audit and take copies of operational documents, to request information, and to take samples, measurements, recordings and photographs for the purposes of evidence gathering and investigation. In a number of Member States studied, including the UK and Germany, inspectors may also seize and render harmless items which

[21] http://www.mst.dk/Virksomhed_og_myndighed/Industri/miljoetilsyn_brugerbetaling/kommunernes_tilsyn/Kommunernes_indsats/

cause imminent danger of serious pollution or serious harm to health; however it is the regulators who are responsible for serving specific administrative sanctions. In Denmark, however, inspectors also have the power to serve an order to rectify non-compliance, to send a notice of injunction or prohibition or to prescribe corrective measures.

By contrast, inspectors in France and Spain may only initiate administrative or criminal procedures. They are not empowered to take administrative sanctions.

The Table 9 includes inspectors' rights and obligations as they are typically set in national legislation.

Table 9: Rights and obligations of inspectors

Rights	Obligations
1. Entry and access to installations, with prior notice 2. Entry and access to installations without prior notice (in case of emergency) 3. Access to and inspection of operational documents 4. Monitor/examine the working processes 5. Request relevant information (e.g. to clarify facts) 6. Record images and sounds 7. Take samples e.g. emissions/pollutants 8. Install monitoring equipment or devices 9. Seizure of equipment 10. Take preventative measures e.g. suspension of operations	1. preparing a report of proceedings to prosecution authorities 2. returning documents and physical evidences to the operator/persons concerned or submitting them to the competent authorities 3. confidentiality 4. prior notification for planned inspections (in respect of access to buildings or documents) to encourage good dialogue with operators

Finally, the European Commission is striving to harmonise national practices with regard to inspections. The Industrial Emissions Directive includes a provision specifically dedicated to environmental inspections, which sets up minimum requirements, applicable to all Member States from January 2013. In particular, it sets the obligations of the operator to assist the inspection. It also requires the establishment and minimum content of environmental inspection plans, programmes for routine site visits, periodicity of inspection and criteria for the environmental risks of the installations. Finally, it sets post-visit reporting obligations.

Article 23
Environmental inspections

1. Member States shall set up a system of environmental inspections of installations addressing the examination of the full range of relevant environmental effects from the installations concerned.
Member States shall ensure that operators afford the competent authorities all necessary assistance to enable those authorities to carry out any site visits, to take samples and to gather any information necessary for the performance of their duties for the purposes of this Directive.
2. Member States shall ensure that all installations are covered by an environmental inspection plan at national, regional or local level and shall ensure that this plan is regularly reviewed and, where appropriate, updated.
3. Each environmental inspection plan shall include the following:
(a) a general assessment of relevant significant environmental issues;
(b) the geographical area covered by the inspection plan;

(c) a register of the installations covered by the plan;
(d) procedures for drawing up programmes for routine environmental inspections pursuant to paragraph 4;
(e) procedures for non-routine environmental inspections pursuant to paragraph 5;
(f) where necessary, provisions on the cooperation between different inspection authorities.
4. Based on the inspection plans, the competent authority shall regularly draw up programmes for routine environmental inspections, including the frequency of site visits for different types of installations.
The period between two site visits shall be based on a systematic appraisal of the environmental risks of the installations concerned and shall not exceed 1 year for installations posing the highest risks and 3 years for installations posing the lowest risks.
If an inspection has identified an important case of non-compliance with the permit conditions, an additional site visit shall be carried out within 6 months of that inspection.
The systematic appraisal of the environmental risks shall be based on at least the following criteria:
(a) the potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents;
(b) the record of compliance with permit conditions;
(c) the participation of the operator in the Union eco-management and audit scheme (EMAS), pursuant to Regulation (EC) No 1221/2009.
The Commission may adopt guidance on the criteria for the appraisal of environmental risks.
5. Non-routine environmental inspections shall be carried out to investigate serious environmental complaints, serious environmental accidents, incidents and occurrences of non-compliance as soon as possible and, where appropriate, before the granting, reconsideration or update of a permit.
6. Following each site visit, the competent authority shall prepare a report describing the relevant findings regarding compliance of the installation with the permit conditions and conclusions on whether any further action is necessary.
The report shall be notified to the operator concerned within 2 months of the site visit taking place. The report shall be made publicly available by the competent authority in accordance with Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information within 4 months of the site visit taking place.
Without prejudice to Article 8(2), the competent authority shall ensure that the operator takes all the necessary actions identified in the report within a reasonable period.

4.2. The national judicial systems

4.2.1. The different actors of the procedure

The presence of numerous actors, some of which are not especially trained in environmental matters, may be an obstacle to efficient enforcement of legislation on industrial emissions. As one judge stated "enforcement is a chain as strong as its smallest element".

In many Member States, prosecutors and judges are not specialised. In Belgium, the environmental criminal cases reaching the prosecutor's office are an outspoken minority of all detected infringements, and the majority of those are brought by prosecutors without specialised knowledge of environmental law. It should be noted that in Belgium, the prosecutor is the primary actor in conducting cases. Similarly in Austria, most cases are brought to the prosecutor by a non-specialised expert. In addition, local officers in the field are not specialised. In Belgium, the lack of skills of the local police is an issue as it partly results in the high rate of dismissal of cases for technical reasons.

The need for greening the judicial network and improving cooperation is widely recognised e.g. the 9th conference of the International Network for Environmental Compliance and Enforcement focused on "Enforcement Cooperation: Strengthening Environmental Governance".[22]

The lack of cooperation and information exchange is a serious obstacle to enforcement and the importance of such cooperation should not be underestimated. For example, with regard to the participation of inspectors and prosecutors in criminal procedures, in Austria it depends on the particular offence and criminal procedure in each case. Different competent authorities take the lead but there is a lack of information exchange between the different authorities. It is up to the authorities/the public prosecutor to develop the case and to go back to the inspectors if necessary. In the Netherlands, the manner in which the authorities responsible for criminal and for administrative enforcement need to coordinate their respective actions within their competences has not been regulated. In practice, the coordination between the Public Prosecutor's Office and Administrative authorities is considered as needing improvement. In the Province of Zeeland, despite a longstanding discussion on the need for structural coordination, ad hoc coordination remains the manner in which in individual cases issues of administrative and/or penal measures with regard to a company are dealt with. In the Province of Groningen, regular coordination meetings do take place between the Public Prosecutors Office and the administration

Where both the inspection and the enforcement body are combined in one organisation as is the case for the England and Wales Environment Agency in the UK, it can provide a very effective partnership between inspectors (who often act as witnesses) and prosecutors who bring the case.

Some stakeholders advocate the establishment of specialised legal structure, i.e. environmental courts and specialist prosecutors, along with environmental police and inspection.

There is currently a tendency within Member States towards gradual specialisation. Below are introduced some examples of specialisation.

Specialised Units of Environmental Prosecutors and Police

In Spain, the establishment of a Special Office of Environmental Prosecutors has resulted in an increase in the number of convictions for environmental offences. Similarly, since 1989, a specialised police unit, the Nature Protection Service *(Servicio de Protección de la Naturaleza*), is tasked with investigating directly or coordinating other police forces on environmental investigations. The Netherlands have also set a special official office for public prosecutors specialised in environment, the *"Functioneel Parket"*. In both countries, the central office is located in the capital city and coordinates environmental prosecutors operating at the regional or local level.

In Hungary, it is planned to set up a department within the Prosecution Office of the Prosecutor General dealing exclusively with environment related offences.

At the European level, two networks already exist:

- The European Union Network for the Implementation and Enforcement of Environmental Law, which groups environmental authorities (IMPEL). One of IMPEL cluster of activities

[22] INECE 9th International Conference, *Enforcement Cooperation: Strengthening Environmental Governance*, June 2011, Canada (http://inece.org/conference/9/)

focuses on permitting, inspection and enforcement looking at practical and technical aspects as these relate to capacity building, improving methodologies and development of good practices

- The European Union Forum of Judges for the Environment (EUFJE) created in 2004 aims at promote the enforcement of national, European and international environmental law through exchange of knowledge and experience, as well as training in environmental law.

The idea to set up a similar European network of environmental prosecutors is being widely promoted. For example, a seminar on "Investigation, prosecution and judgment of environmental offences", organised by the Belgium's Judicial Training Institute in May 2011 generated a strong support in favour of the establishment of such a European initiative for cooperation between public prosecutors on the criminal prosecution of environmental offences.

4.2.2. The criminal proceedings

Criminal procedures vary between Member States, but most such procedures are characterised by complex and lengthy proceedings. In most cases this will involve an initial investigation procedure which allows for evidence to be gathered and a case to be put together. Some Member States (e.g. UK) apply strict evidential and public interest tests before a prosecution can be brought, often at considerable time and cost to the authorities.

Delays in the process may also be due to the complex and time consuming nature of investigations (e.g. in France the first judgement can take place four or five years after the infringement). The investigation phase itself is often subject to an appeal procedure, which varies in complexity and time between Member States. In some Member States, time limits on certain stages of the procedure aim to speed up the process e.g. in Hungary, the initial investigation must be concluded within two months, during which time the prosecutor or investigating authority may collect data and interview the operator.

Some Member States put in place simplified procedures, which allow shortening the procedure, while still ensuring that the operator is subject to a punitive sanction. For instance, in Flanders, the prosecutor has the discretionary power to propose and make settlements, which are considered as a very powerful instrument and the percentage of cases resulting in settlement has recently increased from around 13% to 17%. The following boxes present three examples:

- the fast-track procedure instituted by Spain;
- the transaction procedure in the Netherlands; and
- the newly introduced plead-guilty procedure in France.

Fast-track procedure in Spain

The Law on criminal procedure set a fast-track criminal investigation and prosecution for offences punishable by imprisonment not exceeding five years, or with any other sanction, not exceeding ten years, whatever its pecuniary amount, provided, that criminal proceedings are initiated under a police report and the judicial police has arrested a person and made him/her available to the Police Court *(Juzgado de Guardia)*.

The environmental criminal sanctions enshrined in the Criminal Code do not exceed five years of imprisonment. Therefore this fast-track procedure can apply to those who have committed environmental criminal offences under Chapter IV of the Criminal Code. This requires, however, a policy report and the arrest of the alleged person that committed the environmental offence. This fast track procedure was designed for "*in flagrante delicto*" criminal offences and

it is less likely to apply for environmental crimes relate to the infringement of the IPPC requirement because of the difficulty to prove them.

Transaction procedure in the Netherlands

In the Netherlands, the Public Prosecutor's Office can offer a transaction to offenders, by which the payment of a fine is meant, in "simple" minor cases. The transaction serves as a penalty and avoids the need to go to court. In practice, this offer is often accepted, meaning that only a minority of cases in which the Public Prosecutor is involved actually reach the courts. If a company does not agree with the penalty and refuses the transaction, the case may be brought to the criminal court in first instance.

Plead-guilty procedure in France

The French legislator established in 2004 a "plead guilty" procedure which is applicable to persons who have committed a crime punishable by a fine or imprisonment for a time period not exceeding five years. The sanctions for the infringement of classified installations fall within the scope of this procedure (e.g. to operate a facility without authorisation can lead for individuals to a fine of up to Euros 75,000 and/or one year imprisonment).

Under this procedure the Public Prosecutor can directly propose without trial one or several penalties to a person (including legal persons) that admits the facts and the infringements. The imprisonment penalty proposed by the Public Prosecutor cannot be superior to one year and cannot exceed half of the time period of the one prescribed by law. S/he can also propose a suspension of enforcement. If the offender agrees on the proposal of the Public Prosecutor, this proposal shall be homologated by the President of the Tribunal the same day the proposal was issued. This homologation has the same effect than a judgement. Overall this procedure is much faster than the normal criminal procedure.

4.2.3. Public Access to Justice

Civil society, apart from its role in initiating enforcement procedures through complaints, plays a significant role in enforcement through litigation. The IPPC Directive itself through amendments introduced by Directive 2003/35/EC provides for access to justice to challenge the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of the Directive. However, while some Member States are granting a broad access to justice, others have a more limited approach.

Several procedural aspects are central to an effective access to justice allowing the public, including NGOs, to play their role as a watchdog to support enforcement. In particular, the Member States should ensure that:

- Legal standing for NGOs is not restricted e.g. through strict criteria or strictly interpreting the concept of interest
- It is possible to obtain interim relief and interim measures

- The cost of the procedure should not be an obstacle to public access to justice. These can be considerable if the fees are high and the 'loser pays it all' principle applies. Good practices include effective mechanisms to ensure legal aid.

Recent decisions of the Court of Justice of the European Union should be taken into account when considering possible improvements in public access to justice. These relate to the requirement to ensure *locus standi* for NGOs and to avoid excessive costs of proceedings.

Court of Justice of the European Union's Decisions promoting public access to justice

In Germany, neither individuals nor non-governmental organisations are entitled to join the administrative criminal or the criminal procedure. Neighbours are entitled to challenge a permit for an IPPC installation if this installation violates their property rights or health. The Court of Justice of the European Union decided with judgement of 12 May 2011[23] that the national legislation regulating the standing of non-governmental organisations in court procedures infringes Directive 2003/35/EC and that, as a minimum, non-governmental organisations must have standing to enforce all national provisions based on European environmental legislation.

In another case, the Court has also ruled that national legislation should ensure that the cost of proceedings must not be prohibitively expensive.[24] The Court upheld that this rule covers only the costs arising from participation in such procedures and does not prevent the courts from making an order for costs provided that the amount of those costs complies with that requirement. The Court added that "*although it is common ground that the Irish courts may decline to order an unsuccessful party to pay the costs and can, in addition, order expenditure incurred by the unsuccessful party to be borne by the other party, that is merely a discretionary practice on the part of the courts"*. The Court concluded that a mere practice was not sufficient, recalling that *"the provisions of a directive must be implemented with unquestionable binding force and with the specificity, precision and clarity required in order to satisfy the need for legal certainty, which requires that, in the case of a directive intended to confer rights on individuals, the persons concerned must be enabled to ascertain the full extent of their rights*".

In the same case, the Court also recalled that "*the mere availability, through publications or on the internet, of rules concerning access to administrative and judicial review procedures and the possibility of access to court decisions cannot be regarded as ensuring, in a sufficiently clear and precise manner, that the public concerned is in a position to be aware of its rights on access to justice in environmental matters.*" It concluded that information on the rights offered to the public should be set in specific statutory or regulatory provision.

An example of broad access to justice can be found in Spain with the so-called "*acción popular*" procedure in case of criminal proceedings.

The "popular action" in Spain

In Spain, any person, whether or not offended by a criminal offence can lodge a complaint to the Judge of the Magistrate Court, the so called 'popular action' *(acción popular)*[25]. The Jurisprudence of the Supreme Tribunal *(Tribunal Supremo)* has interpreted these provisions in a

[23] C-115/09, Trianel Kohlekraftwerk Lünen, judgment of 12 May 2011
[24] C-427/07, Commission v. Ireland, judgement of 16 July 2009
[25] Law of criminal procedure *(Ley de Enjuiciamento Penal)*

way that not only natural persons can lodge this popular action but also legal persons, public institutions and organisms[26].

In other words environmental NGOs are entitled to lodge a complaint to the judge of the Magistrate Court when they consider that an environmental criminal offence was committed.

In contrast, under the administrative procedure, the *locus standi* of NGOs is rather limited. Sanctions can be appealed before the administration itself and then to the Administrative Courts. The overall procedure is quite long and thus may lack of effectiveness (e.g. administrative court proceedings can last two or three years after the action was lodged). Environmental NGOs can challenge administrative sanctions (or their omissions) but they have to fulfil very strict criteria which limit their role in the procedure.

[26] Sentencia Tribunal Supremo 79/99

5. National guidance documents

We have already identified throughout the report different guidelines and guidance documents that have been developed by the seven selected Member States to support the different actors of the sanctioning procedure. It can be particularly useful to identify and disseminate principles and criteria, which could support the main actors involved in enforcement and sanctioning. For example, with regard to determining the level of sanctions, these can include the definition of aggravating and mitigating factors to assess the seriousness of the offence, such as defendant's cooperation with the authorities, responsiveness to prior warnings or persistence of the offence, previous convictions for likely offences, the existence of a financial gain for the offender, etc. The following box recalls the key examples which have been identified in the seven countries studied.

Denmark

Environmental Protection Agency Guidelines

- Miljøstyrelsens vejledning nr 6/2005 om vejledning om håndhævelse af miljøbeskyttelsesloven. *(Guidelines from the Environmental Protection Agency on enforcement of the Environmental Protection Act, No 6, 2005)* http://www2.mst.dk/udgiv/publikationer/2005/87-7614-833-5/pdf/87-7614-834-3.pdf
- Miljøstyrelsens vejledning nr 6/2006 on vejledning om miljøtilsyn med industrivirksomheder. *(Guidelines from the Environmental Protection Agency on environmental inspections of industrial installations, No 6, 2006)* http://www.mst.dk/Publikationer/Publikationer/2006/09/87-7052-241-3.htm
- Miljøstyrelsens vejledning nr. 7/2005 om anvendelse af retssikkerhedsloven på miljøområdet *(Guidelines from the Environmental Protection Agency on application of the Legal Protection Act in the field of environment, No 7, 2005)* http://www2.mst.dk/udgiv/publikationer/2005/87-7614-835-1/pdf/87-7614-837-8.pdf
- Notat – General vejledning i udfyldning af skema til brug for beretning om kommuernes miljø indsats i 2010 *(Guidance Note on the use of reporting templates on environmental inspection etc for 2010)* http://www.mst.dk/NR/rdonlyres/9F60847C-08EA-4EF5-823E-CAF87E2E8BE3/0/Indberetningsvejledning2010_Generelt.pdf

Instructions issued by the Director of public prosecution

- Rigsadvokatens meddelse nr. 8/2008 om behandlingen af miljøstraffesager. *(Instructions from the Director of public prosecution concerning judicial procedures for environmental infringement (8/2008*) http://www.rigsadvokaten.dk/media/RM_8-2008.pdf

Agreements and strategies for inspections

- Aftalen mellem fra 2005 om minimumsfrekvenser for samlede tilsyn (*Agreement from July 2005 between the Minister for the Environment and the Local Government Association on minimum frequency for so-called comprehensive inspections with industrial installations)* http://www.mst.dk/Virksomhed_og_myndighed/Industri/miljoetilsyn_brugerbetaling/regler_og_vejledninger/minimumsfrekvenser/

France

- Circulaire du 30/12/10 relative aux thèmes d'actions nationales de l'inspection des installations classées 2011, Ministère de l'Ecologie, du développement Durable, des Transports et du Logement (*Circular of 30/12/2010 relating to the action themes of the national inspection for classified installations 2011, Ministry of Ecology, Sustainable Development, Transport and Housing)* http://www.ineris.fr/aida/?q=consult_doc/navigation/2.250.190.28.8.13727/4/2.250.190.28.6.15
- Circulaire du 03/08/07 relative aux installations classées - Arrêt du Conseil d'Etat du 9 juillet 2007 sur la procédure de mise en demeure, Ministère de l'Ecologie, du développement Durable, des Transports et du Logement (*Circular of 03/08/2007 relating to classified installations – Decision of the State Council of 9 July 2007 on the procedure of letter of formal notice, Ministry of Ecology, Sustainable Development, Transport and Housing)* http://www.ineris.fr/aida/?q=consult_doc/navigation/2.250.190.28.8.2689/5/2.250.190.28.6.2238
- Circulaire n 98-72 du 18/06/98 relative aux installations classées pour la protection de l'environnement: Mise en demeure prévue par l'article 23 de la loi du 19/07/76 (*Circular 98-78 of 18 June related to classified installations for the protection of the environment : letter of formal notice under Article 23 of the Law of 19 July 1976)* http://www.ineris.fr/aida/?q=consult_doc/consultation/2.250.190.28.8.3399

Germany

Administrative Criminal Penalties

- The fine catalogue environment of North-Rhine Westphalia (*Bußgeldkatalog Umwelt*) by the Ministry for the Environment, Nature Conservation, Agriculture and Consumer Protection of North-Rhine Westphalia: http://www.kreisjaegerschaft-coesfeld.de/red/ges-bussgeldkatalog-umwelt-nrw-2010-02-27.pdf
- North-Rhine Westphalia administrative regulation (*Erlass*) that regulates the cooperation between environment protection authorities and the public prosecution office available at: https://recht.nrw.de/lmi/owa/br_bes_text?anw_nr=1&gld_nr=3&ugl_nr=3214&bes_id=2601&val=2601&ver=7&sg=&aufgehoben=N&menu=1

The Netherlands

Administrative procedure

- Provincie Zeeland, Oog op Zeeland: Nota handhaving natuur en milieu, Directie Ruimte, Milieu en Water, 20 February 2007 (Province of Zeeland, *Eye on Zeeland: Memorandum on the enforcement of nature and environment*, Directorate Space management, Environment and Water, 20 February 2007) http://loket.zeeland.nl/informatiecentrum/publicaties/rapporten/handhaving_nm

Inspections

- Enforcement Strategy of the Region Haaglanden (The Hague and surroundings), November 2004.
- Zo handhaven we in Brabant, actualisering handhavingsstrategie 2010 (*This is how we enforce in Brabant*, Inspection strategy of the province of North-Brabant, updated 2010) Hertogenbosch – Groningen, September 2010.

Criminal procedures

- Public Prosecution, Strategy Paper, Instruction on enforcement of environmental law

(Openbaar Ministerie, Strategiedocument, Aanwijzing handhaving milieurecht, Den Haag, 2010), (2010A004). Published in Official Gazette (Staatscourant) 2010, nr. 2953, adopted on 15/02/2010, effective from 01/04/2010, available at www.om.nl.

UK

Environment Agency Guidance

- Environmental Permitting Regulations Operational Risk Appraisal Scheme (Opra for EPR); Opra for EPR version 3.5, April 2010 http://publications.environment-agency.gov.uk/pdf/GEHO0410BSFA-e-e.pdf
- Enforcement and Sanctions Guidance, 4 January 2011 http://publications.environment-agency.gov.uk/pdf/GEHO0910BSZL-E-E.pdf
- Enforcement and Sanctions Statement, Version 1, 25 February 2011 http://publications.environment-agency.gov.uk/pdf/GEHO0910BSZJ-e-e.pdf
- Offence Response Options (ORO) 4 January 2011 http://publications.environment-agency.gov.uk/pdf/GEHO0910BSZN-E-E.pdf
- Regulatory Guidance Series No. 11, Enforcement powers http://www.environment-agency.gov.uk/static/documents/Business/RGN_No__11_Enforcement_powers.pdf

DEFRA guidance

- Civil sanctions for environmental offences, The Environmental Civil Sanctions Order & Regulations 2010, Guidance to regulators in England on how the civil sanctions should be applied, and draft guidance for Wales, January 2010, http://www.defra.gov.uk/environment/policy/enforcement/pdf/defra-wag-guidance.pdf

Other guidance

- The Enforcement Concordat, 1998 (currently under review) http://webarchive.nationalarchives.gov.uk/+/http://www.berr.gov.uk/files/file10150.pdf
- Applying the Regulators' Compliance Code and Enforcement Concordat, Local Better Regulation Office (LBRO) http://www.lbro.org.uk/docs/regulators-compliance-code.pdf
- The Department for Business Innovation and Skills website http://www.bis.gov.uk/policies/better-regulation/improving-regulatory-delivery/implementing-principles-of-better-regulation/regulatory-enforcement-and-sanctions-bill
- National Audit Office, Effective Inspection and enforcement: Implementing the Hampton vision in the Environment Agency, 1st March 2008 http://www.nao.org.uk/publications/0708/hampton_environment_agency.aspx
- Regulators' Compliance Code, Statutory Code of Practice for Regulators, Department for Business Enterprise and Regulatory Reform, 17 December 2007 http://www.berr.gov.uk/files/file45019.pdf
- Regulatory Justice: Making Sanctions Effective, Final Report, Professor Richard Macrory, November 2006 http://www.bis.gov.uk/files/file44593.pdf
- Reducing administrative burdens Effective Inspection and Enforcement, Philip Hampton , March 2005 http://hb.betterregulation.com/external/Hampton%20Report.pdf

The Courts Service, court procedure and sentencing guidelines

- The Attorney General's Guidelines on the acceptance of pleas and the prosecutor's role in the sentencing exercise http://www.attorneygeneral.gov.uk/Publications/Documents/acceptance_of_pleas_guidance.doc.pdf
- The Code for Crown Prosecutors, February 2001 http://www.cps.gov.uk/publications/code_for_crown_prosecutors/
- Magistrates Court Sentencing Guidelines: http://www.sentencingcouncil.org.uk/docs/web_sgc_magistrates_guidelines_including_update_1__2__3_web.pdf
- Costing the Earth: guidance for sentencers, Magistrates Association, 2009 http://www.magistrates-association-temp.org.uk/dox/Costing%20the%20Earth%20for%20MA%20with%20cover.pdf

Annex I - Detailed review of sanctions and procedures applicable to breaches of the legislation on industrial emissions in seven selected countries

Table of content

Annex I- Denmark

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in Denmark

Executive Summary

In the Danish legal system environmental acts are adopted by the Parliament and are supplemented by implementing ministerial orders. The Environmental Protection Act (EPA) is together with the Approval Order the main transposing legislation for Directive 2008/1/EC (IPPC Directive). The Environmental Protection contains the relevant offences and penalties. It is also the legal basis for the Ministerial Order transposing the more technical requirements of the Directive.

The Danish procedures applicable in case of breach of the IPPC Directive are set out in the Environmental Protection Act Chapters 5, 9 and 10 (the administrative procedures, e.g. injunctions and prohibitions – including closure to ensure compliance with legal rules, permits and decisions) and Chapter 13 (the criminal procedures). The criminal penalties include imprisonment and additional corporate fines in some circumstances. Some Ministerial Orders also contain provisions on criminal sanctions. These provisions specifically define which infringements of the requirements of the Act or Regulation shall lead to a criminal penalty. Those obligations that are enforced by Chapter 13 are listed in detail. Section 110(1) of the Environmental Protection Act[27] lists nineteen specific offences referring to specific provisions of this Act.

The table below indicates briefly which of the enforceable provisions of the IPPC Directive are covered by penalties in Denmark. The category of administrative (quasi) criminal sanctions does not exist in Denmark, thus this column is left blank in the table below.

Table 1: Enforceable provisions covered by penalties in Denmark

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	EPA Section 68-70[28] EPA Section 70a-72[29] EPA Section 34(3)[30] EPA Section 41c[31] EPA Section 41- 41d[32]	EPA Section 110(1) –(11) Criminal Code Section 196	
4	-	EPA Section 110(1)(6)	
5	-	EPA Section 110(1)(4) and (8)	
6	-	EPA Section 110(1)(8) and Approval Order Section 22(1)(2) and 22(2)-(3)	
12 (1)	-	EPA Section 110(1)(8) and Approval Order Section 22(1)(2) and 22(2)-(3)	
12 (2)	-	EPA Section 110(1)(6)	
14 (a)	-	EPA Section 110(1)(4)	

[27] The main Danish legal framework related to the environment.
[28] On injunctions and prohibitions (including closure to ensure compliance with legal rules, permits and decisions) as well as on the power to prescribe corrective measures, which are taken at the offender's expense.
[29] On the power to prescribe provision of information and sampling and own control including at the operator's expense.
[30] On refusing an environmental approval and grant special conditions.
[31] On recalling a permit or amend conditions
[32] On amending the permit/conditions through injunctions and prohibitions – including closure of installation in case of significant pollution, risk thereof including failure to ensure BAT.

14 (b)	-	EPA Section 110(1)(4) and 110(1)(7)	
14 (c)	-	EPA Section 110(1)(4) and 110(1)(7)	

Permitting and control functions, including inspections are primarily exercised by the municipalities. However the decentralised units of the Environmental Protection Agency (EPA) of which there are three (EPA Aarhus, Odense and Roskilde),[33] are permitting and supervisory authority for many of the larger and/or most polluting installations, approximately 260 installations. Several guidelines on enforcement and inspections and checklist for inspectors have been prepared.

It is noted that the related Danish legal provisions apply to both natural and legal persons alike. The difference is, however, that further financial penalties may additionally apply to businesses.

The way in which the administrative and criminal sanctions are applied and the factors which regulators must take into account when deciding whether or not to prosecute is determined by various guidance documents, including Environment Agency's guidelines on enforcement of the Environmental Protection Act and the Instructions from the Director of public prosecutions concerning judicial procedures for environmental infringement.

Examples of jurisprudence on the size of fines for e.g. failure to comply with the conditions set in the permit or mandatory emission limit values: The Supreme Court[34] fined a company taking over a chemical installation under bankruptcy DKK 800,000 (about Euros 120,000) and 40 days imprisonment for its Director combined with a fine of DKK 300,000 (about Euros 40,000) for failure to comply with the conditions set in the permit following several injunctions on disposal of chemical waste. Another example is a ruling by the Eastern High Court[35] where a County was fined DKK 500,000 (about Euros 65,000) for failure to comply with the mandatory emission limit values for a waste incineration plant and seizure of the saved amount of DKK 4 millions (about Euros 350,000).

The Danish legislation provides for the use of both administrative enforcement measures and criminal sanctions in conjunction. Regulatory guidance advises the use of either and/or both where it is considered proportionate under the circumstances. Interviews with experts at the Danish Environmental Protection Agency, case law and the case studies reviewed suggest that whilst the range of administrative and criminal sanctions available as a rule are sufficient to ensure that effective and dissuasive penalties can be imposed in case of infringement of IPPC requirements, their application may be enhanced in some cases.

[33] The decentralised units of the EPA were until 31 December 2010 called Environment Centres. The organisational change, which took effect the 1 January 2011, did not entail any changes with regard to competences for permitting and enforcement.
[34] Supreme Court ruling as reported in U2001.2045H.
[35] As reported in MAD 2000 334Ø.

1. Applicable sanctions

The Danish procedures applicable in case of breach of the IPPC Directive are set out in the Environmental Protection Act Chapters 5 and 9 (the administrative procedures) and Chapter 13 (the criminal procedures).

The Environmental Protection Act provides for two types of ***administrative procedures***:

1) Preventive and remedial measures, e.g. the administrative sanctions that the supervisory authority has at its disposal to prevent that negative impact on the environment occurs as a result of future operating conditions. Such measures relates to the possibility of refusing an environmental approval and granting special conditions where the responsible persons have lost their so-called 'environmental responsibility' pursuant to Section 40a – e.g. physical or legal persons convicted pursuant to the Criminal Act Section 196, the Environmental protection Act Section 110(2) or similar provisions issued pursuant to this Act as well as Environmental Protection Act Section 41 – 41d the power to issue injunctions and prohibitions – including closure of the installation in case of significant pollution and risk thereof, including failure to ensure BAT. All these measures apply only when the operators have lost their environmental responsibility.

2) Enforcement measures to ensure compliance with inter alia legal rules, permits and decisions. The Environmental Protection Act gives to the competent authority the power to serve orders, injunctions and prohibitions, to ensure compliance with legal rules, permits and decisions (EPA Section 65 – 73, in particular Section 68 – 69). It may also prescribe corrective measures, which are taken at the offender's expense. The competent authority shall report certain infringements to the public prosecution authorities.

   The main enforcement measure to ensure compliance is an 'order'[36] by which an installation is required to rectify an instance of non-compliance, e.g. comply with permit requirements and permit conditions, inculcate environmental compliance of a previously notified condition and/or decision. The competent authority shall also at the same time notify that the instance(s) of non-compliance will be reported to the police/ public prosecutor if it is not rectified. The order may be supplemented by: 'injunctions or prohibitions', e.g. to restore the original situation or prohibit continued operation and, where required, order the closure of the facility and/or so-called 'self-help actions': prescription of corrective measures, which are taken at the offender's expense. The competent authority shall also in certain instances report the infringements to the public prosecution authorities. The administrative procedure is initiated once an infringement is identified as described below in Section 2.

Chapter 13 of the Environmental Protection Act sets ***criminal penalties*** that include imprisonment and additional corporate fines in some circumstances. Some Ministerial Orders also contain provisions on criminal sanctions. These provisions specifically define which infringements of the requirements of the Act or Regulation shall lead to a criminal penalty. Those obligations that are enforced by Chapter 13 are listed in detail. Section 110(1) of the Environmental Protection Act[37] lists nineteen specific offences referring to particular provisions of this Act.

The Environmental Protection Act provides for the principle of proportionality with regard to administrative enforcement measures, which should not be more intrusive than necessary in individual cases and take into account the circumstances of each particular situation e.g. the risk and type of negative impact on the environment.

[36] In Danish the term is 'indskærpelse'.
[37] Main Danish legal framework related to the environment.

Offences are often divided between 'offences' and 'serious offences'. For instance serious offences are characterised when an offender acted deliberately or by gross negligence if the infringement resulted in damage to the environment or risk of damage or achieved or intended economic advantages.

The Criminal Code also sets up offences and corresponding penalties and sanctions. The provisions of the Criminal Code have precedence if the sanctions it lays down are equal or more severe than those established by the Environmental Code.

It is noted that the related Danish legal provisions apply to both natural and legal persons alike. The difference is, however, that further financial penalties may additionally apply to businesses.

Table 2 below indicates the types of offences and related administrative and criminal penalties in Denmark for each of the key enforceable obligations under the IPPC Directive.

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in Denmark

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	No new installation (listed in the Regulation issued pursuant to Section 35 – Annex I of the IPPC Directive) may be operated without a permit issued in accordance with this Act. Installations must not be extended or changed structurally or operationally before extension or change is approved. ***Environmental protection Act Section 33 and Approval Order Section 2***	Orders, injunctions and prohibitions. ***Environmental protection Act Section 69***	Establish, commence or operate an installation without a permit from the relevant authority. ***Environmental protection Act Section 110(1)(6)*** <u>Serious offence</u> It is a serious criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator. ***Chapter 13 Section 110(6) of the Environmental Protection Act read in conjunction with Chapter 13 Section 110 paragraph (2) of this Act***	The fines are determined by the Courts as part of the criminal case and the Acts do not set any maximum amount or range. Recommended minimum fines 50,000 (approximately Euros 2,700). Seizure of the net profit. Examples: Ruling by the Eastern High Court (ØLD 1991-11-16) a company fined DKK 300,000 (Euros 4,500) for disposal of 21 tons of soil containing heavy metals without the mandatory permit. Seizure of DKK 1,2 million (Euros 161,000). <u>Serious offence</u> Imprisonment up to two years. (This underlines the legislator's desire for severe penalties for environmental offences, including a significant increase of the fines.) <u>Legal persons</u> The Danish penalties provisions apply to both natural and legal persons alike. Pursuant to the Environmental Protection Act Section 110 (4), legal persons may be imposed sanctions pursuant to the fifth Chapter of the Criminal Act. Furthermore the Criminal Code provides for imprisonment of up to 6 years for the violations of the environment legislation under aggravating circumstances.

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to supply information for application for permits	Failure to supply information for application for permits. ***Environmental Protection Act Section 35, paragraph 2, Section 39 and the Approval Order Section 7***	Refusal of granting a permit. It basically rests with the applicant on his own initiative to provide the approving authority with the necessary information. In case of failure to do so, the authority may specify what additional information must be provided and set a deadline. In case of repeated failure to submit the requested information, the procedural detrimental effect occurs, namely that the approving authority must consider the application as annulled. For existing installations which are required to obtain a permit pursuant to § 39, the information may be sought through an injunction issued pursuant to Section 72. According to Section 39, paragraph. 2, the approving authority can, if necessary, prohibit the continued use of unapproved parts of the company if the installation fails to meet the statutory deadlines for submission of information. Examples of administrative practice have been published in MAD (Environmental Rulings and jurisprudence) e.g. MAD 2000/1073 in which a permit of an existing company was lifted by the Environmental Protection Agency and the matter remitted for reconsideration, since no measurements for assessment of its noise ratio had been submitted. Another example is MAD 2009/349 in which the Environmental Board of Appeal refused an application as it did not contain the information required for in the Approval Order (Annex 5).	Failure to apply for a permit in accordance with Rules issued pursuant to Section 7 of this Act or failure to apply including supply information for application for permits pursuant to Section 39 of this Act. ***Environmental protection Act Section 110(1)(8)) and Approval Order Section 22(1)(2)***	Ibid for the types of penalties. It has not been possible to find any jurisprudence on the size of the fines for failure to supply information for application of permits.

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to notify the competent authority of any changes in the operation of an installation	Failure to notify the competent authority of any changes in the operation of an installation. Installations must not be extended or changed structurally or operationally before extension or change is approved. ***Environmental protection Act Section 33 and Approval Order Section 2***	Order, injunctions and prohibitions. ***Environmental protection Act Section 69***	The installation is extended/ changed structurally or operationally in a way that increases pollution without approval of the relevant competent authority. This is a serious criminal offence where done intentionally or through gross negligence and if the violation is harmful for the environment or provides economic advantage to the operator. ***Chapter 13 Section 110(6) of the Environmental Protection Act read in conjunction with Chapter 13 Section 110 paragraph (2) of this Act***	Ibid. Recommended level of fines for failure to notify the competent authority of any changes in the operation of an installation, a fine of at least DKK 10,000 (approximately Euros 1,350) is recommended. For the second time there is a violation of Section 110 paragraph 1, there should generally be a doubling of the indicative level of fines. No recent examples of jurisprudence on the size of fines for this type of offences. The jurisprudence does not reflect the more severe fines for violations of the IPPC requirements since 2008.

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to comply with the conditions set in the permit or mandatory ELV's	Failure to comply with the conditions set in the permit or mandatory ELV's. ***Environmental protection Act Section 34 and Approval Order Section 14***	Order, injunctions and prohibitions. ***Environmental protection Act Section 69***	Failure to comply with injunction or prohibition issued pursuant to this Act. ***Environmental Protection Act Section 110(1)(2)*** Failure to comply with the condition of a permit or conditions laid down pursuant to this Act or to rules issued in pursuance thereof. ***Environmental Protection Act Section 110(1)(4)***	Ibid. Recommended level of fines for failure to comply with or to contravene an environmental permit, a fine of at least DKK 10,000 (approximately Euros 1,350) is recommended. For the second time there is a violation of Section 110 paragraph 1, there should generally be a doubling of the indicative level of fines. Examples of jurisprudence on the size of fines: Supreme Court ruling U2001.2045H according to which a company taking over a chemical installation under bankruptcy was fined DKK 800,000 (approximately Euros 120,000) and 40 days of imprisonment for its Director combined with a fine of DKK 300,000 (approximately Euros 40,000) for failure to comply with the conditions set in the permit following several injunctions on disposal of chemical waste. Another example is a ruling by the Eastern High Court where a County was fined DKK 500,000 (approximately Euros 65,000) for failure to comply with the mandatory ELV's for a waste incineration plant and seizure of the saved amount of DKK 4 million (approximately Euros 350,000).

2. Administrative procedure

2.1 General elements on the legal tradition and potential evolution

In 1997 new legislation was introduced with a view to improve enforcement of environmental legislation (the so-called enforcement package). The legislation is intended both to prevent against repeated violations and to provide for more severe sanctions for violations of environment law.

As indicated above, the Environmental Protection Act provides for two types of administrative procedures:

1) Preventive and remedial measures, e.g. the administrative sanctions that the supervisory authority has at its disposal to prevent that negative impact on the environment occurs as a result of future operating conditions. It concerns:

- In case of a new permit, the possibility of refusing an environmental approval and grant special conditions (requiring a financial guarantee) pursuant to EPA Section 34(3), in circumstances where the responsible persons have lost their so-called environmental responsibility pursuant to Section 40a. EPA Section 40a contains an exhaustive list of circumstances when a person or company may lose its environmental responsibility. It includes situations where the person has lost the right to operate the polluting company, or the individual or the corporation is convicted of more serious environmental crimes or failed to pay a major debt to the Authority under so-called self-help action (corrective measures, which are taken at the offender's expense) – e.g. physical or legal persons convicted pursuant to the Criminal Act Section 196, the Environmental protection Act Section 110(2) or similar provisions issued pursuant to this Act. In accordance with Section 40b of the EPA, the Environmental Protection Agency established an Environmental Responsibility Register in which the supervisory authority can access information on whether individuals or corporations have lost their environmental responsibility.
- In case of an existing permit, the possibility of imposing more stringent permit conditions by requiring a financial guarantee or completely revoke an environmental permit pursuant to EPA Sections 41d and 39a. The supervisory authority may in order to prevent repeated violations of environmental legislation (same types or same company or group of persons), use the fact that a company or a person has lost its environmental responsibility to impose more stringent permit conditions or completely revoke an environmental permit.
- The power to issue injunctions and prohibitions – including closure of installation in case of significant pollution and risk thereof, including failure to ensure BAT (EPA Section 41 – 41c). It should be noted that Section 41 to 41d does not apply in case on non-compliance.

2) Enforcement measures to ensure compliance with inter alia legal rules, permits and decisions.
The Environmental Protection Act gives to the competent authority the power to serve orders, injunctions and prohibitions, to ensure compliance with legal rules, permits and decisions (EPA Section 65 – 73, in particular Section 68 – 70). It may also prescribe corrective measures, which are taken at the offender's expense. The competent authority shall also in certain instances report the infringements to the public prosecution authorities.

No administrative fines are provided for.

2.2 Inspections

2.2.1 General information

Permitting and control functions, including inspections are primarily exercised by the municipalities. However the decentralised units of the Environmental Protection Agency (EPA) of which there are three (EPA Aarhus, Odense and Roskilde), [38] are permitting and supervisory authority for many of the larger and/or most polluting installations, approximately 260 installations e.g. those marked with an 's' in Annex I to the Approval Order. For example combustion installations with a rated thermal input exceeding 50 MW, chemical installations for the production of basic organic and inorganic chemicals, industrial plants for the production of paper and card board with a production exceeding 20 tonnes per day and slaughterhouse with a carcase production capacity greater than 50 tonnes per day.

Pursuant to the Environmental Protection Act Section 65 and 66, the supervisory authority (the municipalities or the decentralised EPA units) shall exercise a function of general supervision to ensure that the Environmental Protection Act and the rules laid down by this Act are complied with. To this end the supervisory authority shall assess whether current conditions and permits are sufficient under the applicable law and to assess whether there is a need to prescribe new conditions or to revise existing ones.

The supervisory authority shall also ensure that injunctions and prohibitions are met and that conditions laid down in the permits are observed. Pursuant to the Environmental Protection Act Section 68 the supervisory authority must ensure that instances of non-compliance are brought in compliance unless the instance is of secondary importance, i.e. trifle offence. The administrative sanctions are set out in Section 69 (orders, injunctions and prohibitions – including closure to ensure compliance with legal rules, permits and decisions as well as power to prescribe corrective measures, which are taken at the offender's expense).

Minimum frequency for so-called comprehensive inspections of industrial installations has been set by an agreement from July 2005 between the Minister for the Environment and the Local Government Association (the interest group and member authority of Danish municipalities) with effect from 1st January 2005. It replaces an agreement from 1996. Comprehensive inspection is understood as a review of all environmental consideration of an installation or enterprise. According to the minimum frequency agreement all installations listed in Annex I to the IPPC Directive must have undergone a comprehensive inspection at least within the last 3-year period. The Environmental Protection Agency's Guidelines No. 6 of2006 on Environmental Inspection of industrial installations, contains checklists for the supervisory authority, including on comprehensive inspection. The checklists consist of an indicative list of environmental parameters.

If the minimum frequency for inspections is not met, the Ministry of Environment requests the municipality in question to submit in writing an explanation on how the backlog will be overcome and how the municipality will continue to ensure that minimum frequencies are observed. Municipalities which for several years in a row have not completed the minimum of inspections, is summoned to a meeting of the Environmental Protection Agency to discuss the municipality's inspection efforts. Lists of municipalities not having observed the minimum frequency for inspections are available on internet.[39]

[38] The decentralised units of the EPA were until 31 December 2010 called Environment Centres. The organisational change, which took effect the 1 January 2011, did not entail any changes with regard to competences for permitting and enforcement.
[39] http://www.mst.dk/Virksomhed_og_myndighed/Industri/miljoetilsyn_brugerbetaling/kommunernes_tilsyn/Kommunernes_indsats/

General information on inspection, e.g. the competent bodies, the ratio number of inspectors/number of installations, is reported by the Danish Ministry of Environment in annual reports on inter alia permits for installations governed by Annex I to the IPPC Directive and supervision of these installations. The most recent report 'Environmental Inspection 2009' was published in May 2011.
The report gives details on the activities of the municipalities, Environmental Centres[40] and the Environment Agency in relation to permitting and inspections of enterprises and agricultural facilities. Installations governed by Annex I to the IPPC Directive are reported under a specific heading. It reports inter alia, the ratio number of inspectors/number of installations, the costs related to inspection and supervision, compliance with minimum frequency for supervision and enforcement of environmental legislation, as set out in the agreement with the Minister for the Environment and the Local Government Association (the interest group and member authority of Danish municipalities), mentioned above. 'Environmental Inspection 2009' has been prepared on the basis of annual reports from municipalities and the Environment Centres. All municipal reports are published on www.tilsynsdatabasen.dk.

2.2.2. Key elements of the inspection procedure

The Environmental Protection Agency has issued several guidelines including on key elements of the inspection procedure. They are only available in Danish. The most relevant ones are:

- Guidelines from the Environmental Protection Agency on environmental inspections of industrial installations, No 6, 2006.
- Guidelines from the Environmental Protection Agency on enforcement of the Environmental Protection Act, No 6, 2005.

The guidelines on environmental inspections of industrial installations[41] provide practical instructions for planning, implementation and follow-up of environmental inspections of industrial installations both in terms of the controlling supervision as preventive monitoring work. It is based on practical experience, just as the text is reinforced with examples from environmental administrations. Guidance is thus provided on seven specific aspects of inspections each addressed in individual chapters. The guidelines provide guidance on preparation of the inspection, including collection of information, material and equipment needed, checklists and approaches to inspection.

Practical instructions for the implementation of environmental inspections of industrial installations distinguish between the following types and/or flow of inspections: a) dialogue based inspection; b) inspection taking into account the categorisation of the installation; c) BAT and preventive inspection; d) thematic inspection; e) inspection based on complaint from third party; f) control with the operators' self-monitoring; g) inspection in teams and h) inspections following an accident. The guidelines also outline the specific reporting requirements following inspections and other relevant follow-up activities. The guidelines further set criteria for prioritising between the types of inspections described above and describes the overall framework for drawing up inspection plan(s) based on which the inspectors are deciding on the installation to be controlled ex-officio. Check lists and specific examples of e.g. inspection report, inspection plans are given in the annexes to the guidelines.

The guidelines on enforcement of the Environmental Protection Act[42] provide practical guidance to the supervisory authorities on the application of administrative sanctions, including preventive and

[40] As indicated above, with organisational changes in the Ministry of Environment taking effect as of 1 January 2011, the Environment Centres changed name to the decentralised units of the EPA (EPA Aarhus, Odense and Roskilde).
[41] It is available on the web site of the Danish EPA. http://www.mst.dk/Publikationer/Publikationer/2006/09/87-7052-241-3.htm. The title in Danish is 'Miljøstyrelsens vejledning nr 6/2006 on vejledning om miljøtilsyn med industrivirksomheder'.
[42] It is available on the web site of the Danish EPA. http://www2.mst.dk/udgiv/publikationer/2005/87-7614-833-5/pdf/87-7614-834-3.pdf The title in Danish is 'Miljøstyrelsens vejledning nr 6/2005 om vejledning om håndhævelse af miljøbeskyttelsesloven '.

remedial measures available to the supervisory authority to prevent that negative impact on the environment occurs as a result of future operating conditions and enforcement measures to ensure compliance with inter alia legal rules, permits and decisions. It contains some specific examples of injunctions and prohibitions which can be used as templates. The guidelines further specify cases where the supervisory authority shall report an infringement to the public prosecutors. It also provides directions for cooperation between the environmental authorities and the police/public prosecutors in the cause of criminal proceedings. The guidelines are described further under section 2.2.3 concerning the inspector's enforcement powers.

The environmental inspections and enforcement guidelines are supplemented with a set of Guidelines from the Environmental Protection Agency on the application of the Legal Protection Act in the field of environment, No 7, 2005[43].

Specifically concerning the competencies and obligations of inspectors

Inspections e.g. in the form of on-site visit to installations require as a rule prior notification to the operators (in writing 14 days prior to an inspection) including information such as the purpose of inspection and the visit time and place (Section 5 of the Legal Protection Act). Such prior notification is only required if the inspection involves access to buildings or documents. The notification allows the company to prepare itself, including finding relevant documents and allocate the necessary time and make sure that its appropriate representatives will be present. Moreover notification prior to the inspection is seen as the best basis for a good dialogue with the business.

The requirement for prior notification of inspections may be waived, if it would forfeit the purpose of the inspection. The decisive factor should be whether or not a prior notified inspection would allow inspection of the installation under normal operating conditions. Inspections should at least be conducted un-notified, if the inspectors suspect that irregularities can be corrected or will be hidden in the period leading up to the notified inspection visits, but otherwise will be continued after the visit. See also Section 2.2 in the Guidelines from the Environmental Protection Agency on application of the Legal Protection Act in the field of environment, No 7, 2005.

In case of un-notified inspection, the supervisory authority must bring a letter of notification at the inspection (including visit), explaining why the inspection was not notified prior to the visit.

The supervisory authorities have in accordance with Section 87(1) of the Environmental Protection Act, access to all areas of the industrial installation and/company. If they are refused access, they can under police protection if necessary obtain access. As a general rule, no warrant is required.

It follows from the Environmental Protection Act Sections 65, 66 and 68 that the supervisory authority shall maintain an active control, including undertaking concrete inspection and investigations, when:

- A decision – e.g. an order, injunction or prohibition –requires this.
- Received complaints or other notifications are not clearly unfounded.
- There is a substantiated suspicion of non-compliance and/or illegal conduct pursuant to Section 68.

Obligations of the operator

It follows from Section 87(3) of the Environmental Protection Act that the operator and his employees shall provide the supervisory authority with all necessary assistance to enable them to carry out the inspections within the installation, including to take samples and to gather any information necessary

[43] It is available on the web site of the Danish EPA.) http://www2.mst.dk/udgiv/publikationer/2005/87-7614-835-1/pdf/87-7614-837-8.pdf The title in Danish is 'Miljøstyrelsens vejledning nr. 7/2005 om anvendelse af retssikkerhedsloven på miljøområdet'.

for the performance of their duties. As indicated above, the supervisory authorities have in accordance with Section 87(1) of the Environmental Protection Act, access to all areas of the industrial installation/company. Criminal sanctions may be imposed pursuant to Section 110(1)(9), in cases where the operator opposes to the supervisory authority's access to the installation.
General description of the procedure including any procedural steps before the issuing of a sanction by an administrative authority

A quality management system has been developed to ensure consistency in inspections. It is available at the web site of the Danish Ministry of Environment.[44] According to this system, the following steps are to be undertaken by the inspector during physical inspection (visit at the installation) before the possible issuing of a sanction by the supervisory authority:

- Check extent to what the installation/company complies with the conditions set out in the environmental permits, discharge permits, wastewater permits, injunctions, and where relevant, environmental technical descriptions as well as the Environmental Protection Act and related Ministerial Orders.
- Record whether the actual physical conditions and activities at the company are consistent with the data, the municipality is in possession of.
- The industrial installation/company must be offered a voluntary dialogue with a view to preventing environmental problems and promoting clean technologies and environmentally friendly behaviour.
- Any administrative and/or criminal sanctions need to be communicated orally. The operator must be informed that the inspection report will contain the same enforcement action(s).

The inspection must be planned, implemented and followed-up in accordance with applicable Guidelines on inspection and enforcement of industrial installations etc.

2.2.3 The inspectors' enforcing powers

As indicated above, it follows from Sections 69 to 72 of the Environmental Protection Act and the guidelines from the Environmental Protection Agency on enforcement of the Environmental Protection Act, No 6, 2005, that the following measures can be taken by the inspector in case infringement of permit-related obligations and/or risk to public health or to the environment, in the following order:

- Recommend that instances of non-compliance are brought to an end and at the same time to inform about the possible consequences (injunctions or prohibitions) if this does not happen
- Serve an order: by which an installation is ordered to rectify an instance of non-compliance, e.g. comply with permit requirements and permit conditions, inculcate environmental compliance of a previously notified condition and/or decision, including notify that the instance(s) of non-compliance will be reported to the police/ public prosecutor if it is not rectified
- Send notice of injunction or prohibition, e.g. to restore the original situation or prohibit continued operation and, where required, order the closure of the facility
- Convey an oral injunction - where immediate action is necessary
- Perform self-help action, prescribe corrective measures, which are taken at the offender's expense
- Report the infringements to the public prosecution authorities

[44] See http://www.mim.dk/ministeriet/Lovstof/Kvalitetsstyring/Miljoeprocedurer/M7.htm.

The aim of serving an order and, if relevant, issue an injunction or prohibition would be to:

1. stop offending (with the aim of stopping an illegal activity from continuing/occurring)
2. restore and/or remediate (with the aim of mitigating environmental harm or damage that has already occurred)
3. bring under regulatory control (with the aim of bringing an illegal activity into compliance with the law)

Chapter 10 of the Environmental Protection Act in particular Section 74 contains provisions on the form in which administrative sanction shall be communicated to the addressee and others as relevant.

It follows from Section 68 and 69 of the Environmental Protection Act that the supervisory authority shall report the infringement to the public prosecutors in case the administrative sanction have not resulted in an illegal activity being brought under regulatory control. According to the Guidelines on enforcement of the Environmental Protection Act, certain types of infringement would require that the supervisory authority should report the infringement to the police although the administrative sanction has resulted in the illegal activity being brought into compliance with the law. This would be the case where a new IPPC installation is operated without the required permit or and typically in cases where offender acted deliberately or by gross negligence and the infringement resulted in a damage to the environment or risk of a damage, or actual or intended economic advantages.

An overview on the number of initiated and finished procedures in Denmark IPPC facilities is provided in the tables below.

Table 2.1 Overview of municipal enforcement reactions in relation to IPPC facilities

Year	Number of facilities	Warnings/ recommendations (non-binding)	Orders	Injunctions	Prohibitions	Reports to public prosecutors
2007	372	35	53	6	3	1
2008	308	40	56	11	0	2
2009	283	23	60	7	0	3

Table 2.2 Overview of EPA (decentralised units) enforcement reactions in relation to IPPC facilities

Year	Number of facilities	Warnings/ recommendations (non binding)	Orders	Injunctions	Prohibitions	Reports to public prosecutors
2007	379	131	42	1	0	1
2008	393	70	45	12	0	1
2009	396	57	117	37	3	2

Source: interview with the Danish EPA –Aarhus

These figures show that the number of orders has increased over the years in comparison to the warnings/recommendations. In 2009, they represent by large the most commonly used type of measure. The number of reports to public prosecutors is rather limited, indicating that criminal procedures are the exception, which may suggest that the administrative sanctions are effective.

2.3 Appeal against the administrative decision

Enforcement measures, e.g. an order, injunction or prohibition served pursuant to Section 69 of the Environmental Protection Act e.g. to stop an illegal activity from continuing/occurring, mitigating environmental harm or damage that has already occurred or bringing an illegal activity into compliance with the law cannot be appealed by the operator or by any other person. This follows from Section 69(3) of the Environmental Protection Act.

Preventive measures, including injunctions e.g. to reduce pollution or risk of pollution from an installation pursuant to the Environmental Protection Act Section 41 and 42 can be appealed pursuant to Environmental Protection Act Section 91 to the Environmental Appeal Board by the person (natural or legal) on whom the injunction is served. Pursuant to Section 93, the time limit for making an appeal is not later than for weeks. Pursuant to Section 74, a decision on the injunction (preventive) must contain the necessary appeal guidelines as set out in Section 77.

Under Section 95 appeals against injunctions have suspensive effect unless the appeal – or competent - authority decides otherwise.

3. Judicial procedure (if relevant - with a focus on criminal sanctions)

3.1 General information

Criminal offences relevant to the IPPC Directive are set out in Section 110 to 110b of the Environmental Protection Act. The criminal penalties include imprisonment and additional corporate fines in some circumstances. The Criminal Code also sets up offences and corresponding penalties and sanctions. The provisions of the Criminal Code have precedence if the sanctions it lays down are equal or more severe than those established by the Environmental Code.

As with administrative sanctions, the way in which these provisions are applied and the factors which regulators must take into account when deciding whether or not to prosecute is determined by various guidance documents, including Environment Agency's guidelines on enforcement of the Environmental Protection Act and the Instructions from the Director of public prosecutions concerning judicial procedures for environmental infringement.[45]

3.1.1 Criminal offences

Section 110 of the Environmental Protection Act specifies, as described above in Section 1, Table 2, a range of criminal offences for non-compliance with the Act or legislation issued based on the Act. The most relevant offences to the IPPC Directive are:

- Failure to comply with an injunction or prohibition issued pursuant to this Act (Environmental Protection Act Section 110(1)(2));
- Establish, commence or operate an installation without a permit pursuant to Section 33 from the relevant authority (Environmental Protection Act Section 110(1)(6));
- Failure to comply with or to contravene an environmental permit condition (Environmental Protection Act Section 110(1)(4));
- Failure to submit information or test results pursuant to Section 71 (1) or Section 72[46] (Environmental Protection Act Section 110(1)(7));

[45] Rigsadvokatens meddelse nr. 8/2008 om behandlingen af miljøstraffesager. Only available in Danish see http://www.rigsadvokaten.dk/media/RM_8-2008.pdf;

[46] Section 71(1) is about notification in case of interruption of operation or accidents resulting in substantial pollution or risks of pollution. Section 72 concerns provision of information upon request from the municipality or the EPA which are relevant for assessing the pollution or risks of pollution.

- Failure to apply for a permit in accordance with Rules issued pursuant to Section 7 of this Act or failure to apply pursuant to Section 39 of this Act (Environmental Protection Act Section 110(1)(8));
- Prevent the authorities to access the premises as required by Section 87 (Environmental Protection Act Section 110(1)(9));
- Failure to comply with the permitting – or supervisory authority's decision for provision of a financial guarantee pursuant to Section 39a (Environmental Protection Act Section 110(1)(4) and (14).

3.1.2 Additional (miscellaneous) criminal offences and related measures

- Failure to prevent an imminent threat of pollution or prevent further discharge of pollutants pursuant to Section 71(2) (Environmental protection Act Section 110(1)(17));
- Failure to implement the necessary preventive measures against an imminent threat of environmental damage or all practicable measures to minimise environmental damage and prevent further environmental damage, pursuant to Section 73c (Environmental Protection Act Section 110(1)(18)).

Furthermore the Criminal Code provides for imprisonment of up to 6 years for violations of the environment legislation under aggravating circumstances which result in:

- significant pollution of air, water, soil
- significant harm to the environment due to disposal of waste.

3.1.3 Criminal sanctions

Pursuant to Section 110(4) of the Environmental Protection Act, criminal sanctions are not restricted to the operator, but may be brought against any person (natural or legal) who commits an offence.
The Danish criminal sanctions applicable in case of breach of the legislation transposing the IPPC Directive are set out in the Environmental Protection Act Section 110 and 110b. The Criminal Code also sets up offences and corresponding penalties and sanctions. The provisions of the Criminal Code have precedence if the sanctions it lays down are equal or more severe than those established by the Environmental Code.

The criminal penalties include:

1. Fines including corporate fines in some circumstances (Environmental Protection Act Section 110(1)).
2. Imprisonment for 'serious offences'. For instance serious offences are characterised when an offender acted deliberately or by gross negligence if the infringement resulted in damage to the environment or risk of damage, or actual or intended economic advantages (Environmental Protection Act Section 110(2)).
3. Seizure/confiscation of any profits earned (Section 110(5) of the Environmental Protection Act)
4. Default fines/daily penalty.

Pursuant to Environmental Protection Act Section 110b, the right to carry on an activity covered by Chapter 5 can be revoked by a court order, where a person:

1) has been convicted for violation of Section 196 of the Criminal Code or
2) repeatedly or under otherwise aggravating circumstances have
(i) violated the provisions of the Environmental Protection Act or regulations issued pursuant thereto,
(ii) failed to comply with any prohibition or injunction issued on the basis of the Environmental Protection Act or regulations issued pursuant thereto or

(iii) disregarded permit condition(s) approval issued on the basis of the Environmental Protection Act or regulations issued pursuant to this Act.

The criminal sanctions applied have been assessed on a systematic basis by the Danish Environmental Protection Agency, most recently in a study carried out for the Agency in 2005.[47] The study was initiated to analyse a number of criminal cases[48] on nature conservation, environmental protection and planning legislation with a view to assessing the degree to which the processing of cases and sanctions are satisfactory. The primary objectives of the study were to ascertain whether:

- the level of fines is uniform, and possibly whether these are equivalent to sanctions in other comparable areas e.g. infringements of the working environment legislation
- the provisions in environmental legislation that include the possibility of more severe sentences for serious cases are used when it is possible to do so, e.g. Section 110(2) of the Environmental Protection Act
- confiscation is used to an appropriate degree and whether profits earned or sought are taken into account when setting fines, e.g. Section 110(5) of the Environmental Protection Act
- default fines are used to a sufficient degree and in a uniform manner.

The study concluded inter alia that level of fines within the environmental protection area are characterised by the fact that there is no trace of the large fines that have formerly been imposed in the most serious cases. The largest fine in the material is DKK 150,000 (approximately Euros 20,000). According to the author, there are no cases in the material which ought to have resulted in a significantly higher fine than DKK 150,000. Either the infringements that formerly resulted in large fines do not occur, or the environment authorities do not report them. In general, the fines in the less serious cases are small. This includes cases against both private individuals and against a number of commercial enterprises who have also been sentenced to pay fines of a few thousand Danish kroner (approximately Euros 1,000).[49]

Following the study, the Environmental Protection Act was amended to increase the level of fines.

The amendment,[50] which came into force on 1 April 2008, inter alia, introduced a provision on the factors which must be taken into account when deciding the size of the fine, namely the objectives of the Environmental Protection Act as set out in Section 1 and the fact that the offence is committed in connection with the exercise of a profession should be considered as an aggravating circumstance. The purpose of the amendment was to implement a stricter level of fines in less serious cases of violation of the Environmental Protection Act. With this aim in view, the comments to the Act amending the Environmental Protection Act indicate a number of recommended minimum sizes of the fines, including for the following violations of the IPPC related obligations:

- Establish, commence or operate an installation without a permit pursuant to Section 33 from the relevant authority, a fine level of at least DKK 50,000 (approximately Euros 2,700) is recommended
- Failure to comply with or to contravene an environmental permit, a fine of at least a DKK 10,000 (approximately Euros 1,350) is recommended.

[47] Report from the Danish Environmental Protection Agency 20/2005. Assessing the application of criminal sanctions in criminal cases in the field of nature conservation, environmental protection and planning legislation. (Arbejdsrapport fra Miljøstyrelsen, 20/2005. Undersøgelse af anvendelse af sanktioner m.v. i straffesager på natur-,miljø- og planområdet) http://www2.mst.dk/Udgiv/publikationer/2005/87-7614-831-9/pdf/87-7614-832-7.pdf

[48] A total of 133 criminal cases on infringements of environmental legislation and 112 cases on infringements of planning legislation and nature conservation legislation were analysed. All cases were completed in 2003 and 2004 and resulted in court rulings, agreement to pay a fine in court or to the police.

[49] See p. 11 of the Study of which a summary in English is available at the web site of the Danish EPA: http://www2.mst.dk/Udgiv/publikationer/2005/87-7614-831-9/pdf/87-7614-832-7.pdf

[50] See L2008 173 FT 2007-08 (2.samling): 283,1857, 2024; A9; B133

The second time there is a violation of Section 110(1), there should generally be a doubling of the indicative level of fines. The comment to the amendment comments that it remains the Courts, which ultimately determine what penalty should be decided for any violation of law.

3.1.4 Criminal procedure

The Instructions from the Director of public prosecutions concerning judicial procedures for environmental infringement cases [51] contains instruction for the police and prosecutor's investigation, prosecution, submission of infringement cases for the State Prosecutor, the Danish Environmental Protection Agency and cooperation with other environmental authorities, including during trial. In these Instructions, the existing directives for the criminal procedure for violation of the environmental legislation are updated.

Criminal offences for IPPC-related breaches in Denmark typically include the following steps: the prosecutors representing the Commissioners'[52] lodge applications with the City Courts to obtain warrants, which allow the police and prosecution to undertake certain measures during investigation. These applications are considered by a City Court judge and the defendant is afforded legal representation. All criminal cases for IPPC-related breaches will begin in City Courts.

The Danish system does not include investigating magistrates, but leaves the control of police investigations to the courts and the Prosecution Service. The legal staff of the Commissioner decides in accordance with Section 719 of the Administration of Justice Act whether to prosecute or not. If a defendant is expected to plead guilty, a formal charge is sent to the City Court in the jurisdiction of the defendant's habitual residence. The Court summons the defendant and if he does indeed plead guilty in court and the plea is sustained by corroborating evidence, the presiding City Court judge passes sentence. If the defendant pleads or is expected to plead not guilty, a formal indictment is drawn up and lodged with the City Court in the jurisdiction where the crime is alleged to have been committed. The defendant and witnesses are then summoned by the prosecution. In cases where the prosecution does not request a sanction more severe than a fine, the case will be tried by a single City Court judge. In other cases the judge sits with two lay judges and together they decide the question of guilt and the sentence to be imposed. Witnesses may be examined by the prosecution, the defence and the Court. After the closing remarks by his counsel, the defendant is invited to address the Court before the sentence is passed.

3.2 Possibilities of appeal

Pursuant to Section 902 of the Administration of Justice Act, if found guilty after a trial, the person convicted may appeal to the High Court against the conviction and if he was sentenced a fine of more than DKK 3,000 (app Euros 400). The Prosecution Service may appeal if other penalties than fines or seizure apply. A notice to appeal against the conviction or sentence must be served within 14 days in accordance with Section 904 of Administration of Justice Act.

[51] Only available in Danish "Rigsadvokatens meddelse nr. 8/2008 om behandlingen af miljøstraffesager" at the web site of the Director of public prosecutions: http://www.rigsadvokaten.dk/media/RM_8-2008.pdf.

[52] The organisation of the Prosecution Service is set out in the Administration of Justice Act. The service is structured as a hierarchy of three levels headed by the Director of Public Prosecutions (the General Prosecutor). The second level comprises six units called Regional Public Prosecutors, while at the local level there are 12 Commissioners heading both the local prosecution service and the police.

4. Synergies between administrative and criminal procedures

4.1 Administrative versus criminal procedures

The Danish legislation does not prevent regulatory authorities from applying administrative enforcement measures and criminal sanctions in conjunction. On the contrary, the legislation provides for the use of both measures and regulatory guidance advises the use of either and/or both where it is considered proportionate under the circumstances. The way in which the administrative and criminal sanctions are applied and the factors which regulators must take into account when deciding whether or not to prosecute is determined by various guidance documents, including the Environmental Protection Agency's guidelines on enforcement of the Environmental Protection Act and the Instructions from the Director of public prosecutions concerning judicial procedures for environmental infringement. Administrative measures will thus be used with the option to resort to criminal prosecution where operators have breached their permit conditions or where administrative procedures are not complied with.

The following examples of jurisprudence – as well as the recent case studies described below in Section 4 – illustrate how administrative enforcement measures and criminal sanctions are applied in conjunction:

Supreme Court ruling U2001.2045H: A company taking over a chemical installation under bankruptcy was fined DKK 800,000 (approximately Euros 120,000) and 40 days imprisonment for its Director combined with a fine of DKK 300,000 (app. Euros 40,000) for failure to comply with the conditions set in the permit following several injunctions on disposal of chemical waste.

Another example is *a ruling by the Eastern High Court* where a County was fined DKK 500,000 (approximately Euros 65,000) for failure to comply with the mandatory emission limit values for a waste incineration plant and seizure of the saved amount of DKK 4 mill (app. Euros 350,000). Reported in MAD 2000.334

The Danish Environmental Protection Agency has launched a review of the enforcement of the environmental legislation by the municipalities, the decentralised units of the Environmental Protection Agency and the public prosecution authorities (the police).[53] The project reviews eighty-one enforcement cases, including some concerning violations of the IPPC legislation completed in respectively nine municipalities, one decentralised EPA unit, and three public prosecution/police districts. It should be noted that the project only reviews a rather limited number of enforcement cases and only in some units/districts and that the cases cover different types of violations of the environmental legislation. However, expert opinions of interviewees[54] at Environmental Protection Agency and preliminary findings of the enforcement project suggest:

- that there is a tendency among enforcement authorities to issue recommendations/warnings rather than serve an order;
- the frequency of violations are significantly higher among small facilities/enterprises than larger installations;
- reporting of violations to the public prosecutions authorities is inadequate. The guidance on when reporting of violations should take place as set out in the Enforcement guidelines issued by the Ministry are thus not frequently not followed;

[53] The title in Danish is : 'Kommunernes, miljøcentrenes og politiets håndhævelse af miljølovgivningen'.
[54] The interviewees in the Danish Environmental Protection Agency including one of the decentralized units were Tina Strand Overgaard, Marianne Ripka and Helene Pedersen.

- the criminal procedure is often rather lengthy. It appears that environmental enforcement cases are given a rather low priority and lower than enforcement of animal welfare cases. It should be noted that there are some examples of efficient and expedient criminal cases though;
- the recommended level of fines are frequently not adhered to;
- cooperation between the environmental enforcement authorities and the public prosecutions authorities could be enhanced.

5. Conclusions

The Danish legislation provides for the use of both administrative enforcement measures and criminal sanctions in conjunction. Regulatory guidance advises the use of either and/or both where it is considered proportionate under the circumstances. Interviews with experts at the Danish Environmental Protection Agency, case law and the case studies reviewed above suggest that whilst the range of administrative and criminal sanctions available as a rule are sufficient to ensure that effective and dissuasive penalties can be imposed in case of infringement of IPPC requirements, their application may be enhanced in some cases.

Proportionality

The Danish Environmental Protection Act provides the supervisory authorities with several administrative sanctioning tools in order to ensure compliance with the relevant provisions of the legislation transposing the IPPC Directive. The Environmental Protection Agency and the Director of public prosecutions have issued guidance and instructions to ensure that the regulators' approach is proportionate to the risks posed. Criminal penalties for non-compliance are intended to reflect the nature and gravity of the offence, by providing for convictions either 'summarily' or 'on conviction on indictment', with maximum sentences and fines for both types of offences. Both administrative and criminal penalties may therefore be deemed as fulfilling the criterion of proportionality.

Effectiveness

The administrative tools available to regulators include a range of different orders, injunctions or prohibitions which may be served on the operator, depending on the nature of the breach or level of harm posed to the environment. It follows from Section 68 and 69 of the Environmental Protection Act that the supervisory authority shall report the infringement to the public prosecutors in case the administrative sanction have not resulted in an illegal activity being brought under regulatory control. Furthermore according to the Guidelines on enforcement of the Environmental Protection Act, certain types of infringement would require that the supervisory authority report the infringement to the public prosecutors although the administrative sanction has resulted in the illegal activity being brought into compliance with the law. This would be the case where a new IPPC installation is operated without the required permit or and typically in cases where offender acted deliberately or by gross negligence and the infringement resulted in damage to the environment or risk of damage, or actual or intended economic advantages.

The Danish regulator systematically reviews the effectiveness of enforcement of the environmental legislation, including IPPC legislation, by the municipalities, the environmental centres and the public prosecution authorities. The reviews have several times resulted in amendments to the sanction provisions of the Environmental Protection Act, including amendments aimed at increasing the level of fines. Ways and means to enhance the administrative procedures in particular inspections have also been addressed by agreements between the Minister for the Environment and the Local Government Association (the interest group and member authority of Danish municipalities) on minimum frequency for so-called comprehensive inspections with industrial installations and the Environmental

Protection Agency's Guidelines on inspection and enforcement, e.g. by establishing checklists for the supervisory authority's inspection of industrial installations and providing detailed guidance on the application of the administrative sanctions.

It has not been possible to obtain specific data on the number of the administrative sanctions that have not resulted in an illegal activity being brought under regulatory control and criminal procedures although the administrative sanction has resulted in the illegal activity being brought into compliance with the law. However while data on enforcement cases and expert interviews indicate that overall the administrative enforcement sanctions are effective to ensure that instances of non-compliance of the IPPC legislation are brought into compliance, there seems to be a tendency among enforcement authorities to issue recommendations/warnings rather than serve an order or an injunction/prohibition.

Expert interviews also suggest that the guidance on when reporting of violations should take place as set out in the enforcement guidelines issued by the Ministry are not systematically followed and that reporting of violations to the public prosecutions authorities is in some cases inadequate.

Furthermore, the criminal procedure is viewed as rather lengthy in many cases. It appears that environmental enforcement cases are given a rather low priority, in particular in relation to animal welfare cases for which enforcement is more expeditious. It is noted that there are several examples of efficient and expedient criminal cases though. Specific cases also seem to indicate that the recommended level of minimum fines is not always adhered to. Finally specific cases suggest that cooperation between the environmental enforcement authorities and the public prosecutions authorities may be further enhanced.

Dissuasiveness

The administrative sanctions including the suspension or restriction of activities, variation of the permit conditions or even revocation of the permit are viewed as rather stringent, especially seen together with the supervisory authority's obligation to report certain instances of non-compliance to the public prosecution authorities, although the administrative sanction has resulted in the illegal activity being brought into compliance with the law. Criminal sanctions applied are also seen as dissuasive, due to the sizable fines and sentences which may be imposed.

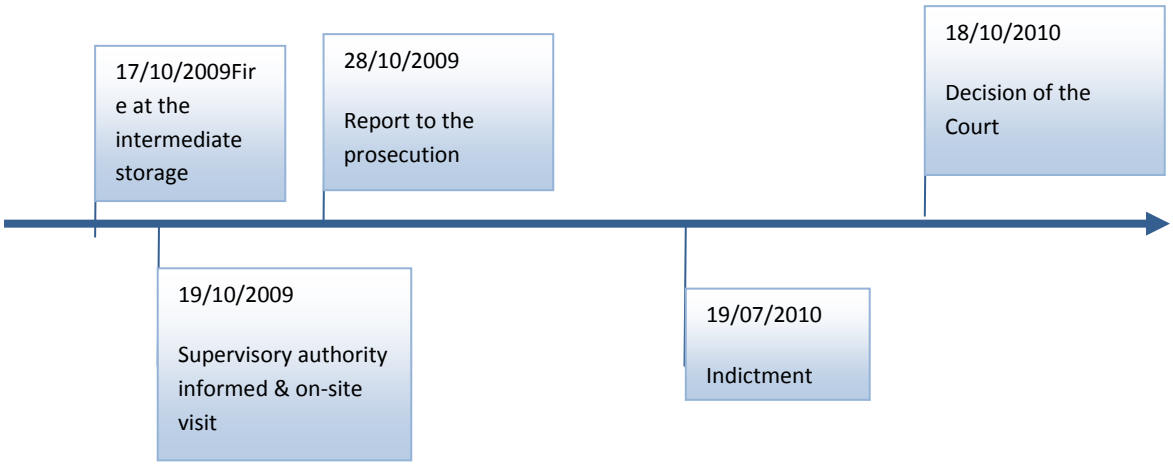
Interviews with experts in the Danish Environmental Protection Agency seem to indicate that the frequency of violations is significantly higher among small facilities/enterprises than larger installations, including IPPC facilities and that although the recommended level of minimum fines (a fine of Euros 1,350) may not always in itself be dissuasive, the risk of bad publicity should a criminal case be opened against an offending facility appears to have a more deterrent effect than the very size of the fine.

Case studies

The Danish Environmental Protection Agency has identified two recent cases, where administrative and/or criminal sanctions have been imposed, to be addressed in this review. Both cases are final (all appeal procedures exhausted). The Danish Environmental Protection Agency has provided information on the background for the cases and description of the procedure from the first measures taken once the infringement was identified. The cases and other possible cases have been discussed during several telephone conferences with three interviewees[55] in the Agency who have provided their opinion as to the proportionality, the effectiveness and the dissuasive character of the sanction imposed.

Case study 1 – administrative and judicial procedure for non-compliance with permit conditions

Timeline of the procedure



Description of the background

The company is a landfill for waste, which by their nature are included in Appendix C Section 105 of the Approval Order in Annex I and is an IPPC activity. As a secondary activity, the facility has within the landfill, an intermediate storage for waste suitable for incineration for which a special approval was granted on 26 October 2006.

On 17 October 2009 the intermediate storage caught fire. The fire was only extinguished after eight days. Heavy smoke affected the residents surrounding the landfill. Large amounts of extinguishing water was discharged through the sewage system to the nearby municipal wastewater treatment plant and caused problems in the purification process.

Only on 19 October 2009 was the supervisory authority, the then Environment Centre Roskilde, informed about the fire by surrounding residents. The authority, however, was never informed about the fire by the operator of the landfill.

Legislation applicable

[55] See footnote 21.

The Environmental Protection Act Section 71(1) provides that:

- anyone responsible for activities likely to cause pollution shall immediately notify the supervisory authority when interruption of operation or accidents result in substantial pollution or risks of pollution.

Concerning the sanction, under the Environmental Protection Act Section 110 (1)-(4) and (1)-(7) as well as paragraphs 2, 4 and 5

- failure to comply with or to contravene an environmental permit condition is subject to a fine, unless a more severe penalty under other legislation would apply (paragraph 1 no 4).
- failure to give notification as specified in section 71 is subject to a fine, unless a more severe penalty under other legislation would apply (paragraph 1 no 7).
- the penalty may be detention when an offender acted deliberately or by gross negligence if the infringement resulted in damage to the environment or risk of damage or achieved or intended economic advantages (paragraph 2)
- the provisions apply to both natural and legal persons alike. The difference is, however, that further financial penalties may additionally apply to businesses (paragraph 4 and 5)

Procedure

On 19 October 2009, the supervisory authority made an on-site inspection following the notification of the fire at the landfill. The on-site inspections assessed that the quantity of waste stored at the intermediate storage, that had caught fire, was larger than the maximum quantity specified in the permit conditions. The operator of the landfill did not object to this. It was also the authority's assessment that the height of waste stored at the intermediate storage exceeded the maximum set in the permit conditions. However, this could not be exactly measured, but merely documented by photographic evidence.

The supervisory authority considered that two of the environmental permit conditions were not met. It was further the authority’s assessment that the company over a few months had knowingly stored larger quantities of waste than permitted at the intermediate storage at the landfill. Consequently an order to comply with the conditions of the permit was served and the infringement was reported to the public prosecution authorities.

The supervisory authorities proposed the public prosecutors the following minimum fines under the existing penalty charges to:

- DKK 20,000 (approximately Euros 2,700) for not having informed about the fire in accordance with the Environmental Protection Act Section 71
- DKK 20,000 (approximately Euros 2,700) for handling waste in a manner that causes pollution in non-compliance with the Environmental Protection Act Section 43
- DKK 10,000 (approximately Euros 1,350) for non-compliance with conditions of permit.

Furthermore seizure/confiscation of the earned profit was recommended (in accordance with Section 110(5) of the Environmental Protection Act) for not having applied for environmental approval for storing a large amount of waste.

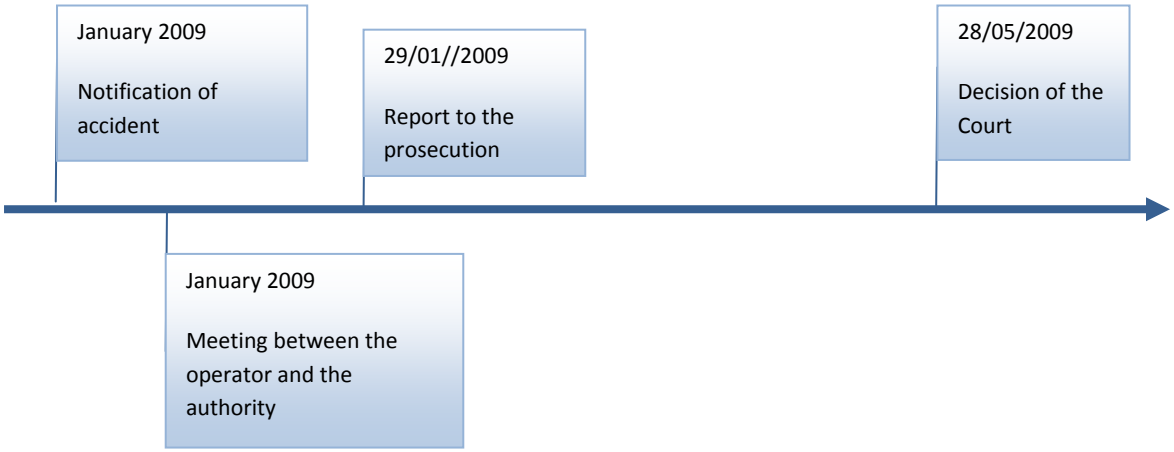
The infringement was reported on 28 October 2009 to prosecutors, who by 19 July 2010 had prepared indictment. The criminal procedure was concluded on 18 October 2010. The company was sentenced to a total fine of 40,000 DKK (approximately Euros 5,400), but was acquitted of confiscation claim for which the recommended amount was DKK 6,968 (less than Euros 1,000). The company was dismissed for failure to comply with conditions of maximum height, but was convicted for all other matters.

General comments on sanctions

The Danish Environmental Protection Agency finds that the enforcement process was sufficient and efficient. The level of fine was in line with the recommended level for fines. Compliance was restored.

Case study 2 – judicial procedure for non-compliance with the permit conditions

Timeline of the procedure



Description of the background

The Dairy produces cheese and yogurt and is a facility covered by the IPPC Directive and the transposing Danish legislation. The dairy has been running since the 1980s. It has a permit which allows for a production of up to 25,000 tonnes of cheese and yogurt per year, equivalent to a consumption of 105,000 tonnes of raw milk.

The Dairy is located in the outskirts of a village in an urban area close to rural areas as well as areas designated for small industrial and craft facilities associated with housing. A residential area is also close to the dairy.

In January 2009, the environmental authority received a notification from the dairy that an environmental accident had occurred at the facility. Two pallet tanks containing 1000 litres of respectively nitric acid and formic acid had been hit by an unknown truck and the contents of both containers had run into the municipal drain and into a close-by brook.

According to the permit the company's raw materials and additives, including detergents must be stored in such a way that there can be no discharge to the public sewer, soil or groundwater.

Legislation applicable

The Environmental Protection Act Section 34 and the Approval Order Section 14 concerning the conditions of the permit stipulate that:

- the permit shall include […] other requirements relating to the design and operation that are necessary to ensure that it does not cause significant environmental pollution, including by accident

Concerning the sanction, under the Environmental Protection Act Section 110 (1)(4) and 110(4) and (5):

- failure to comply with or to contravene an environmental permit condition is subject to a fine, unless a more severe penalty under other legislation would apply (paragraph 1 no 4).

- the provisions apply to both natural and legal persons alike. The difference is, however, that further financial penalties may additionally apply to businesses (paragraph 4 and 5)

Pursuant to the Environmental Protection Act Section 110(2) the penalty may be detention or imprisonment for a maximum term of two years if the offender acted deliberately or by gross negligence and the infringement resulted in:

1) damage to the environment or risk of damage, or
2) actual or intended economic advantages, including savings, for the offender or for others.

The recommended minimum fine for failure to comply with or to contravene an environmental permit condition is DKK 10,000 (approximately Euros 1,350). See also Section 3.1.3 on criminal sanctions.

Procedure

In January 2009, the environmental authority received a notification from the dairy that an environmental accident had occurred at the facility. Two pallet tanks containing nitric acid and formic acid had been hit by an unknown truck and the contents of both containers had run into the municipal drain and into a close-by brook.

Upon request from supervisory authority, the dairy submitted five days after the accident, a report informing the environmental authorities in more details about the accident. The report also contained an action plan to prevent a similar accident. It appeared from the report that an unidentified truck hit some pallet tanks placed on a paved area with drainage to the municipal water drain. The environmental impact of the accident was discharge of 2,000 l of formic acid and nitric acid into the brook next to the dairy.

The environmental permit had been reviewed just prior to the incident. According the conditions of the permit the company's raw materials and additives, including detergents, must be stored in such a way that it cannot be discharged to the public sewer, soil or groundwater. Furthermore it was mentioned in the permit that the rainwater from the actual paved areas should be led to an equalisation tank. Consequently it was considered likely that waste water from a major accident could be retained and treated before discharge or reuse.

Following the incident, a meeting between the municipality and the competent environmental authorities were held to discuss the environmental impact of the accident on the brook.

As the infringement resulted in damage to the environment, on 29 January the supervisory authority reported the infringement to the public prosecution authorities which opened criminal proceedings. The criminal case was closed 28 May 2009 with a fine of Euros 1,341. The supervisory authority was consulted by the public prosecution authorities on the level of the fine.

General comments on sanctions

As it can be seen from the description of the procedure, the enforcement process was efficient and quick. As there was no imminent serious danger to health in the present and no immediate action was required to prevent the spreading of contamination or pollution, the Danish Environmental Protection Agency considered that there was no basis for 'self-help actions' to be made. The level of fine was in line with the recommended level. Although a fine of Euros 1,350 may not in itself be dissuasive, the risk of bad publicity should a criminal case be opened against an offending facility appears to have a more deterrent effect then the very size of the fine (which corresponds to approximately 30% of an average Danish monthly salary).

Bibliography

Please note that none of the listed documentation is available in English. For ease of reference an English translation of the titles is provided below:

Legislation

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frequency for so-called comprehensive inspections with industrial installations) http://www.mst.dk/Virksomhed_og_myndighed/Industri/miljoetilsyn_brugerbetaling/regler_og_vejledninger/minimumsfrekvenser/

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Annex II- France

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in France

Executive Summary

Both administrative and criminal sanctions can apply for the infringement of the legislation transposing the IPPC Directive in France. These sanctions can be imposed separately on the offender and even be cumulative.

In France, the legal regime of administrative sanctions tends to become similar to the criminal legal regime. However, unlike criminal sanctions, administrative sanctions cannot deprive liberty. Furthermore, administrative sanctions do not have to precisely describe infringements to the laws, the reference to the obligations to be fulfilled is considered sufficient.

Inspectors of classified installations are not empowered to take administrative sanctions but they can issue formal records *(procès-verbaux)* of the infringement to the Public Prosecutor *(Procureur de la Republique)* if there is ground for starting a criminal procedure and to the Prefect (the State's representative in a department or region). There is a general increase in the number of controls from inspectors. In 2010, 94% of priority IPPC installations, 94% of IPPC installations with potential issues, and 80% of the other IPPC installations were inspected.[56]

The Prefect, receiving formal records from inspectors identifying infringements, is bound to send a letter of formal notice to the operator of installations stating that s/he shall comply with specific requirements within a certain time-period (e.g. to complete necessary work on the installation). If the operator does not comply with these requirements in this time-period (the warning period), the Prefect can issue different types of administrative sanctions (e.g. the suspension of the operation, the closure or removal of the facility, the sealing of a facility). This warning period is quite effective, for instance in 2006 only around 10% of the letters on formal notice ended-up in administrative sanctions.

Operators of classified installations can appeal against these administrative sanctions to the administrative Courts together with third parties such as persons, legal entities, municipalities and groups of municipalities that shall be concerned by the drawbacks or hazards the operation of the facility presents for the convenience of the neighbourhood, public health and safety, agriculture, the protection of nature and the environment, the conservation of sites and monuments or elements of the archaeological heritage. The Code of the Environment (CoE) contains provisions facilitating appeals against administrative decisions by environmental associations, which are considered very effective.

The criminal procedure is often initiated by the Public Prosecutor based on information received from inspectors of classified installations or the judiciary police *(police judiciaire).* Victims of the infringements have the option to become private parties *(partie civile)* and file a claim before the Public Prosecutor *(juge d'instruction).* They can lodge this claim only if they have suffered personal damage directly caused by the offense. The CoE facilitates the initiation of criminal proceedings for environmental protection associations and several administrative bodies involved in the management of the environment (e.g. water agencies) that are entitled to exercise the rights recognised as those of the civil party at a criminal court in relation to the acts constituting an infringement of the provisions relating to classified installations.

[56] The French inspection procedure classifies installations depending on their potential risks on health and the environment under three categories: priority IPPC installations (e.g. upper tier SEVESO establishments, waste landfill), IPPC installations with potential issues and other IPPC installations. Priority installations must be inspected at least every year while IPPC installations with potential issues must be inspected at least every three years.

The time period to issue a criminal sanction varies a lot depending on the specificities of each case (about 18 months from the moment the infringement is identified to 5 or 6 years when infringements shall be further investigated by the public prosecutor). The French legislator, however, established in 2004 a 'plead guilty' procedure which is applicable to persons (including legal persons) who have committed a crime punishable by a fine or imprisonment for a time period not exceeding five years. Sanctions for the infringement of provisions on classified installations fall into the scope of this procedure which is much faster than the normal one**.**

The table below indicates the provisions of the IPPC Directive covered by a sanction in France. The category of administrative (quasi) criminal sanctions does not exist in France, thus this column is left blank in the table below.

Table 1: Enforceable provisions covered by penalties in France

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	-	-	
4	Article L514-2 of the CoE	Article L514-9 of the CoE	
5	Article L514-2 of the CoE	Article L514-9 of the CoE	
6[57]	-	-	
12 (1)	-	Article R514-4 of the CoE	
12 (2)	-	Article L514-9 of the CoE	
14 (a)	Article L514-1 (I) (1) (2) (3) of the CoE	Article R.514-4 (1) of the CoE and Article L.514-9 IV of the CoE	
14 (b)	-	Article R514-4-5of the CoE	
14 (c)	-	Article L.514(12) of the CoE	

[57] This is considered to be covered by a general principle of law that requires that true information shall be provided when applying for an authorisation.

1. Applicable sanctions

Both administrative and criminal sanctions can apply to the infringement of environmental law in France. These sanctions are not linked and can be imposed separately on the offender. There are different types of administrative sanctions depending on which provisions of the environmental legislation are infringed. For instance Book V Title I of the Code of the Environment (CoE) on classified installations for the protection of the environment transposing the IPPC Directive contains different administrative sanctions that can be issued by the Prefect (the State's representative in a department or region). These are, the suspension of the operation, the closure or removal of the facility, the sealing of a facility, the deposit of a sum corresponding to the amount of the work to be carried out and the enforcement ex officio of the measures required.

The French Criminal Code does not encompass general sanctions related to harm made to the environment. These criminal sanctions are scattered in specific sectors of the legislation on the environment (e.g. legislation on classified installations,[58] waste,[59] water pollution,[60] and air[61]). French Law provides three categories of criminal offences which are serious offences *(crimes),* offences *(délits)* and petty offences *(contravention).* Most criminal offences related to harm made to the environment are either offences *(délits)* or petty offences *(contraventions).* For instance infringements to certain provisions of Book V Title I of the Code of the Environment (CoE) on classified installations for the protection of the environment transposing the IPPC Directive can lead to one year imprisonment and a fine of Euros 75,000. The 1994 amendment of the Criminal Code established the criminal liability of legal persons in French Law. Pursuant to Article 121(2) of the Criminal Code, legal persons, with the exception of the State, are criminally liable for the offences committed on their account by their organs or representatives. For instance legal persons can be criminally liable to a fine of Euros 375,000 for operating a classified installation without an authorisation.

Table 2 below indicates the types of administrative and criminal offences and related penalties in France for each of the key enforceable obligations under the IPPC Directive.

[58] Article L.514-9 and following of the CoE, Articles R.514-4 and R.514-5 of the CoE
[59] Article L. 541-46 and following of the CoE
[60] Article L. 216-6 and following of the CoE
[61] Article L. 226-9 and following of the CoE

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in France

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating a facility without an authorisation or registration or declaration required. ***Article L514-2 first paragraph of the CoE***	Suspension by the prefect of the operation of the facility until the decision on the application for authorisation is issued. ***Article L514-2 first paragraph of the CoE*** If an operator fails to comply with the notice to rectify its situation or if its application for approval is refused, the prefect may, if necessary, order the closure or removal of the facility. ***Article L514-2 second paragraph of the CoE*** The prefect may proceed to the sealing of a facility that is maintained or operated in contravention of a measure of removal, closure or suspension. ***Article L514-2 third paragraph of the CoE***	<u>Without authorisation or registration</u> To operate a facility without authorisation or registration. ***Article L514-9 of the CoE***	<u>Without authorisation or registration</u> Individuals: - A fine of up to Euros 75,000 - Up to one year imprisonment ***Article L514-9 of the CoE*** Legal persons: A fine of up to Euros 375,000 (75,000 x 5) - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities; - Judicial supervision for a period of five years; - The final closure or a suspension of the installation for a period of five years; - The exclusion from public tenders either permanently or for a period of five years; - Prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation; - The posting of the ruling or distribution thereof by the press or by any electronic means to the public. ***Article L.514-19 of the CoE***

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
				Complementary measures: -The ban of the use of the facility ; -The rehabilitation of the premises. ***Article L.514-9 IV of the CoE***
Obligation to supply information for application for permits	This is not considered an administrative offence.	No sanctions.	This is not considered a criminal offence.	No sanctions.
Obligation to notify the competent authority of any changes in the operation of an installation			Failure to notify to the Prefect, any modifications to the facility, its operation or vicinity leading to significant changes in the elements for the application of the authorisation. ***Article R514 (5) of the CoE read in conjunction with Article R512-33 of the CoE***	Individuals: A fine up to Euros 1,500. Legal persons: A fine up to Euros 7,500. ***Article R.514-4 (1) of the CoE***
Obligation to comply with the conditions set in the permit or mandatory ELVs	<u>Infringement or non-compliance with the following requirement:</u> Obligation to comply with the conditions imposed on the operator of a classified facility. ***Article L514-1 (I) of the CoE***	The Prefect issues a formal notice to the operator to comply with the said conditions by a set deadline. If, on expiry of the deadline set for performance, the operator has not complied with the said order, the Prefect may: 1° Oblige the operator to deposit with the Treasury a sum corresponding to the amount of the work to be carried out, which sum will be returned to the operator gradually as the required measures are performed; 2° Have the required measures enforced ex officio and at the expense of the operator; 3° Issue a ruling, after an opinion has been given by the competent advisory commission of the local region *(département)* suspending the operation of the facility until the conditions imposed have been fulfilled and take the necessary provisional measures. ***Article L514-1 (I) (1) (2) (3) of the CoE***	Offences listed in Article R.514-4 of the CoE: Failure to comply with the general rules and technical regulations applicable to the installations subject to authorisation. These rules and regulations determine the appropriate measures to prevent and reduce the risks of an accident or of pollution of any kind occurring, as well as the conditions of integration of the facility into the environment and of rehabilitation of the site after operations have ceased. ***Article R514 (3) of the CoE read in conjunction with Article L512-5 of the CoE*** Failure to comply with the requirements set in the permits related to: -The effectiveness of best available techniques; -The quality, purpose and use of surrounding environment and the balanced management of water resources; - Emission limits based on best available techniques, within the meaning of Directive 2008/1/EC of 15 January 2008 for installations authorised by the relevant Minister; -The reduction or prevention of long range pollution and transboundary pollution; -The start-up, malfunction or sudden stop of the installations;	<u>Penalties related to the offences listed in Article R.514-4 of the CoE</u> Individuals: A fine up to Euros 1,500. Legal persons: A fine up to Euros 7,500. ***Article R.514-4 (1) of the CoE*** <u>Penalties related to the offences listed in Article L514-11 of the CoE</u> Individuals: - A fine up to Euros 75,000; - Up to six months imprisonment Legal persons: - A fine up to Euros 375,000 (75,000 x 5); - The ban, either permanently or for a period of five years, to exercise directly or indirectly one or more social or professional activities;

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
			-The analyses and measures to control the installation and the monitoring of its effects on the environment and the conditions under which the results of these tests and measures are carried to inform the Inspectors of classified installations and services in charge of water policy; - Reporting and quantification of emissions of greenhouse gas emissions for the relevant installations. ***Article R514 (3) of the CoE read in conjunction with Article R512-28 of the CoE*** Failure to comply with additional conditions proposed by inspectors of classified installations set in complementary Orders. ***Article R514 (3) of the CoE read in conjunction with Article R512-31 of the CoE*** Failure to comply with the conditions set by Ministerial Order related to the presentation of the overview of plant operation. ***Article R514 (3) of the CoE read in conjunction with Article R512-45 of the CoE*** Failure to comply with the declaration requirements related to emission of pollutants and production of waste. ***Article R514 (3) of the CoE read in conjunction with Article R512-46 of the CoE*** **Offences listed in Article L-514-11 of the CoE** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations determined for the application of Articles L. 512-1 (e.g. requirements related to the distance from dwellings, from buildings habitually occupied by third parties, establishments receiving the public, waterways, communication routes, water catchment areas, or zones destined for dwellings by binding planning documents). ***Article L-514-11 of the CoE read in conjunction with Article L512-1 of the CoE***	- Judicial supervision for a period of five years; - The final closure or a suspension of the installation for a period of five years; - The exclusion from public tenders either permanently or for a period of five years; prohibition, either permanently or for a period of five years, to conduct a public offering of financial securities or the admission of its financial securities to trading on a regulated market; - Penalty of confiscation; - The posting of the ruling or distribution thereof by the press or by any electronic means to the public. ***Article L.514-19 of the CoE*** <u>Complementary measures:</u> -The ban of the use of the facility; -The rehabilitation of the premises. ***Article L.514-9 IV of the CoE***

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
			The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations indispensable for the protection of the convenience of the neighbourhood, or for public health and safety, or for agriculture, or for the protection of nature and the environment, or for the conservation of sites and monuments or elements of the archaeological heritage, related to the means of analysis and measurement and the means of intervention in case of an incident. ***Article L-514-11 of the CoE read in conjunction with Article L512-3*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations preventing and reducing the risks of an accident or of pollution of any kind occurring, as well as the conditions of integration of the facility into the environment and of rehabilitation of the site after operations have ceased. ***Article L514-11 of the CoE read in conjunction with Article L512-5 of the CoE*** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the evaluations to be conducted or the remedies to be implemented which are rendered necessary either by the consequences of an accident or an incident occurring in the facility, or by the consequences of a failure to comply with the conditions imposed by the present Title, or by any other hazard or drawback interfering or threatening to harm the aforementioned interests**.** The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to particular requirements due to local circumstances set by the prefect in the registration order. ***Article L514-11 of the CoE read in conjunction with Article L512-7-3 of the CoE***	

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
			The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the necessary requirements set by a complementary Order of the prefect for installations that shall be registered. ***Article L514-11 of the CoE read in conjunction with Article L512-7-5 of the CoE***	
			The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the general requirements in the declaration set by the prefect**.** ***Article L514-11 of the CoE read in conjunction with Article L512-8 of the CoE***	
			The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to the necessary specific requirements imposed by the prefect to installations subject to declaration**.** ***Article L514-11 of the CoE read in conjunction with Article L512-12 of the CoE***	
			The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations related to evaluations to be done and implementation of remedies required by the prefect that are necessary as a consequence of an accident or incident at the facility or due to the breach of conditions imposed under the legislation on classified installations**.** ***Article L514-11 of the CoE read in conjunction with Articles L512-20 of the CoE***	

2. Administrative procedure

2.1 General elements on the legal tradition and evolution

Administrative sanctions are increasingly used for infringements of environmental law in France. Several factors explain this tendency. Administrative sanctions are seen as a solution to limit the number of cases brought to criminal Courts that are more and more congested. Administrative procedures are quicker and simpler to apply than criminal procedures. Furthermore, it is also considered that administrative bodies are more capable to deal with environmental matters than Courts, which lack technical expertise in this domain.[62]

The legal regime of administrative sanctions tends to become similar to the criminal legal regime. Both administrative and criminal sanctions shall respect the following principles:

- The principle of legality;
- The principle of proportionality of the sanction;
- The principle of personality of penalties;[63]

The main difference between administrative and criminal sanctions mainly lies on the person that issues the sanction. Pursuant to the Constitutional Council, sanctions are unilateral decisions taken by an administrative authority, within the framework of its public power prerogatives, imposing a penalty for the infringement of laws and regulations.[64] Unlike criminal sanctions, administrative sanctions cannot deprive liberty.[65] Furthermore administrative sanctions do not have to precisely describe infringements to the laws, the reference to the obligations to be fulfilled is considered sufficient.[66]

Pursuant to a 1994 report from the Council of State there are around 500 different types of administrative sanctions in France.[67] Several types of administrative sanctions can apply for the infringement of the legislation on classified installations (e.g. closure or removal of the installation, the sealing of the installation, the deposit of a sum corresponding to the amount of work to be done). Prefects have thus the capacity to apply the appropriate sanction for each specific infringement.

In other legal systems these administrative sanctions would not be considered sanctions but injunctive or preliminary measures.

2.2 Inspections

2.2.1 General information

The Ministry for Ecology, Sustainable Development, Transport and Housing[68] is responsible for the inspection of classified installations. Under the authority of the Prefects of Department, inspection and enforcement are mainly carried out for most industrial facilities by the regional directorates for the environment, planning and housing[69] and the regional and inter-departmental directorate for environment and energy[70] in Paris and its surrounding area, the departmental directorates of social

[62] Milieu Ltd & Huglo Lepage, *Study on measures other than criminal ones in the EU Member States*, National report for France, (2004
[63] Legifrance, *Guide de légistique*, available at : http://www.legifrance.gouv.fr/html/Guide_legistique_2/sommaire_guide_leg.htm, updated 2 April 2008
[64] Decision 89-260 DC of 28 July 1989
[65] Ibid.
[66] Ibid. foot note number 5
[67] Ibid. foot note number 5
[68] Ministère de l'Ecologie, du Développement durable, du Transport et du Logement
[69] Directions régionales de l'environnement, de l'aménagement et du logement
[70] Direction régionale et interdépartementale de l'environnement et de l'énergie

cohesion and protection of the population[71] for farms, slaughterhouses, animal carcass disposal contractors and some food processing activities. These different bodies are designated under the generic name of 'inspection of classified installations'.

There are about 1,500 inspectors (equivalent to 1,150 full-time) (engineers, technicians and veterinary surgeons) all of whom are sworn State officials.[72] They are responsible for controlling all classified installations, including IPPC installations, which include 6,400 installations out of 500,000 installations (as of 31 December 2009).

After the explosion of a nitrate factory in Toulouse in 2001, the Government decided to increase the number of personnel in the regional inspectorates and to implement a programme of reinforcement and modernisation of the inspections. This programme adopted in 2004 covered the period 2004-2007. It included various commitments as to the number of inspections, time for responding to complaints and transparency in the inspection activities.

The strategic plan of the inspection of classified installations for 2008-2012 is now the main policy document setting the key priorities and directions of the inspection.[73] It provides in particular for an inspection at least each 3 years in the installations which present an important risk for human health and the environment, including all IPPC installations. Unplanned inspections in particular concerning emissions will be carried out for 10% of the installations subject to authorisation. This objective is still not reached.[74] Each year, the Ministry defines priority actions for the inspection of classified installations. For instance, one of the priorities for inspectors in 2011 is to focus on measures to be followed by classified installations to contribute to the good status of water bodies in 2015 as required under the Water Framework Directive.[75]

In 2006, 30,170 inspections were carried out (1,462 following a complaint, 4,452 following an accident or accidental pollution, 564 after the closing of an installation, and 27,693 planned). The number of scheduled visits rose significantly with an increase of over 100% in 10 years, from 13,000 to about 27,700 visits. In 2010, 94% of priority IPPC installations, 94% of IPPC installations with potential issues, and 80% of the other installations were inspected.[76]

There is a general increase in the number of controls. This is mainly due to the fact that decision-makers and citizens in France are more aware of the potential risks on health and the environment of classified installations.

2.2.2 Key elements of the inspection procedure

The inspectors have a full and permanent right to obtain from the operator the authorisation to enter the site of a classified installation and to be made available any document relating to the installation. Any action to oppose the carrying out of the inspection is qualified as an offence.

The inspectors are bound by professional confidentiality. They cannot reveal or use the manufacturing information they learnt through acceding to the documents relating to the installation. Disciplinary and criminal sanctions apply if they breach their obligation of confidentiality.

[71] Directions départementales (de la cohésion sociale et) de la protection des populations
[72] See the Ministry for Ecology, Sustainable Development Transport and Housing presentation brochure on 'the Inspectorate of Classified Installations Environmental policing of industrial and agricultural facilities' available at: http://installationsclassees.ecologie.gouv.fr/IMG/pdf/plaquetteIC anglais.pdf
[73] Information available at: http://installationsclassees.ecologie.gouv.fr/IMG/pdf/PS_IIC_2008_2010.pdf
[74] Information available at: http://www.developpement-durable.gouv.fr/IMG/pdf/Projet_AN_2011vf.pdf
[75] Information available at: http://www.developpement-durable.gouv.fr/IMG/pdf/Projet_AN_2011vf.pdf
[76] Ministère de l'Ecologie du Développement durable des Transports et du Logement, inspections des installations classées, bilan détaillé des actions nationales 2010 available at: http://installationsclassees.ecologie.gouv.fr/IMG/pdf/bilan_detaille_des_actions_nationales_2010-1.pdf

The inspection's records and findings must be objective and any case of possible non-conformity should be discussed with the operator at the end of the visit. After the visit, the inspector must send to the operator a follow-up letter, which summarizes the inspection findings and describes the measures the inspector plans to propose.

2.2.3 The inspectors' enforcing powers

The main aim of an inspection is to verify compliance of the installation with the conditions set in the permit. When a potential instance of non-conformity is identified, the inspector can initiate an administrative or a criminal procedure. The inspectors have enforcement powers *(pouvoirs de police),* which means that they can issue formal record *(procès verbal)* of the infringement.

If the inspector considers there is ground for starting a criminal procedure, s/he will transmit to the Public Prosecutor *(Procureur de la République),* the formal record of the infringement. It is the Public Prosecutor who decides whether or not to prosecute.

2.2.4 Decision-making process for administrative measures and sanctions

As mentioned above, inspectors have enforcement power through the issuance of formal records but they cannot issue administrative sanctions. Their formal records identifying infringements are sent to the Prefects that are empowered to issue administrative sanctions.

The procedural steps to issue an administrative sanction for infringements to the transposing provisions of the IPPC Directive are covered by Article L.514-1 of the CoE that applies to all classified facilities. This Article provides that regardless of any criminal proceedings that might be brought, and when an inspector of classified installations or an expert appointed by the Minister responsible for classified installations has ascertained a failure to comply with the conditions imposed on the operator of a classified installation, the Prefect serves formal notice to the latter to comply with the said conditions by a set deadline. If, on expiry of the deadline set for performance, the operator has not complied with the said order, the Prefect may then issue administrative sanctions.

The letter of formal notice must take the form of an Order of the Prefect (*Arrêté Préfectoral*). This Order should, as every administrative decision, be motivated and explicitly mention the facts and the legal reasoning on which the decision is based. However the Council of State decided in Case *MEDAD vs. Ste Terrena* of 9 July 2007 that if inspectors identify infringements by operators of classified installations, the prefect has to issue a letter of formal notice requesting the operator to fulfil these requirements.[77] In that case, which represents the majority of cases the Order of the prefect does not have to be motivated.

The letter of formal notice shall specify the appropriate time-frame for the operator to comply with the requirements infringed (e.g. time-frame to complete necessary work on the installation). This time-frame shall not exceed three months and shall only be extended under very specific circumstances. The letter of formal notice cannot include new requirements to be fulfilled by operators.[78] Governmental guidelines recommend that this letter should not only be addressed to the alleged infringer but also to the mayor of the municipality where the installation is located. It also suggests that Prefects should inform interested persons, associations and legal or natural persons about the letter of formal notice (e.g. credit institutions issuing the financial guarantees).[79] Such obligations are however not covered by law.

[77] CE, *MEDAD c. Ste Terrena*, 9 July 2007, n 288367
[78] CE, 15 January 1986, *ministre de l'environnement c/ Société DSB*, req. n° 45118
[79] Circular 98-78 of 18 June related to classified installations for the protection of the environment : letter of formal notice under Article 23 of the Law of 19 July 1976 *(Circulaire n 98-72 du 18/06/98 relative aux installations classées pour la protection de l'environnement: Mise en demeure prévue par l'article 23 de la loi du 19/07/76)*

It is not required in the legislation that the Prefect, before issuing the letter of formal notice, should consult the operator of installations concerned. Several administrative courts have however considered that the letter of formal notice was an individual decision falling under the scope of Article 24 of the Law of 12 April 2000 on the right to citizens in their relationship with the administration.[80] Pursuant to this Article, individual decisions shall be issued only after the interested person was able to present written observations, and on his request oral observations. The Council of State, the highest administrative Court, has however decided in case *MEDAD vs. Ste Terrena* that these observation requirements could not apply to the procedure to issue a formal notice based on infringements identified by inspectors of classified installations.

Therefore the procedure to issue a formal notice was drastically strengthen by the decision of the Council of State in case *MEDAD vs. Ste Terrena* providing less opportunities for the operators to contest the letter of formal notice and reducing the margin of manoeuvre of the Prefect to the setting of the time-frame for the requirements to be fulfilled. The outcome of this case was summarised in a governmental guideline document for Prefects.[81]

It is thus less likely that letters of formal notice for operators of classified installations shall be challenged before administrative Courts because of procedural errors.

Administrative sanctions cannot be issued by the Prefect without prior formal notice to the operator of an installation, unless there is significant threat for health and public order.[82] The letter of formal notice is considered by the jurisprudence as a 'guaranty or last warning' for operators that enable them to regularise their legal situation before the issuance of sanctions.[83] This is confirmed by the fact that 3,000 letters of formal notice were issued in 2006 and only 360 administrative sanctions were imposed (around 10% of the letters of formal notice ended-up in an administrative sanction).

2.3 Appeal against the administrative decision

2.3.1 By the operator

Pursuant to Article L.514-6 (I) (1) of the CoE, administrative sanctions issued by the Prefect for the infringement of provisions of the CoE on classified installations (Article L.514-1) are subject to appeal with unlimited jurisdiction. They may be deferred to the administrative jurisdiction by the applicants for authorisation or operators within a period of two months beginning on the day on which they were informed of the said rulings.

Article L.160-1 of the CoE defines operators as any public or private natural or legal person that effectively exercises or controls, as a professional, an economic activity profitable or non-profitable.

2.3.2 By a person other than the operator

Article L.514-6 (I) (2) of the CoE, provides that administrative sanctions issued by the Prefect for the infringement of provisions of the CoE on classified installations (Article L.514-1) are subject to appeal by the following third parties:

-Persons or legal entities;

[80] CAA Bordeaux, 18 October 2005, *ministre de l'Aménagement du territoire et de l'Environnement c/ société Terrena*, req. n° 02BX00745 et 13 février 2006, *ministre de l'Ecologie et du Développement durable c/ établissements Aubrun*, req.n° 02BX01549)

[81] Circulaire du 03/08/07 relative aux installations classées - Arrêt du Conseil d'Etat du 9 juillet 2007 sur la procédure de mise en demeure

[82] CE, 31 Mai 1989, *Société Corse de Pyrotechnie Socopy et autres*

[83] CAA Nantes 16 December 1998 Arrêt Duliere req.n 96NT00872

-Municipalities or groups of municipalities;

They shall be concerned by the drawbacks or hazards the operation of the facility presents for the interests referred to in Article L. 511-1 (the convenience of the neighbourhood, public health and safety, agriculture, the protection of nature and the environment, the conservation of sites and monuments or elements of the archaeological heritage). They shall lodge a complaint to the administrative Court within a period of one year as of the publication or posting of the said rulings. However, if the installation did not start functioning after 6 months of the publication or posting of the ruling, a complaint can still be lodged 6 months after the start-up.

The time period is reduced to 6 months for quarries and one year to livestock farms and installations of public interest (See Article L.514-6 (II) of the CoE).

Persons in the neighbourhood

Interest parties are defined based on the geographic location of the installation, the nature of the installation, its size and its potential impacts on the interest set in Article L.511-1. It is noteworthy that persons lodging a complaint do not have to prove that they have an interest. It would be either the administration or the operators of the installation that will have to prove that the complainants do not have an interest to lodge a complaint.

Environmental associations

Pursuant to Article 6 of the Law of 1901, any association regularly declared can, without specific authorisation, access justice.[84] An association can only challenge an administrative measure that was based on a legislation that has a direct link with its field of activities (e.g. environmental associations on administrative decisions taken pursuant to the legislation on classified installations). Moreover, to grant *locus standi* the judge shall take into account the geographical area of action mentioned in the Statutes of the association (the geographical element). An administrative sanction issued to an operator of an installation in a specific region of France could only be challenged by an environmental association that includes in its Statutes this region as a geographical area of action. Article L.142-1 paragraph 1 of the CoE specifically provides that any association for the protection of the environment is allowed to initiate a case before the administrative Court for any complaints relating to the association's purposes. These associations shall however demonstrate that they have a legitimate interest to challenge this Act.

Pursuant to Article L.141-1 of the CoE, declared associations that exercise their statutory activities for at least three years, in the field of nature protection and the management of wild fauna, the improvement of the living environment, water protection, air, soils, sites and landscapes, and town planning, or those whose purpose is the control of pollution and nuisances and, in general, those working principally for the protection of the environment may be recognised by the administrative authorities are known as 'approved environmental protection associations'.

Article L.142-1 paragraph 2 provides that these 'approved environmental protection associations' are considered as being entitled to act against any administrative decisions with a direct relation to their purpose and their statutory activities and generating harmful effects on the environment on all or part of the territory for which it is approved. They could, for instance, challenge an administrative sanction related to the infringement of the legislation on classified installations to the administrative Court because they consider that this sanction is not stringent enough to impede potential harmful effects on the environment.

Municipalities or groups of municipalities

[84] Law of first July 1901 related to the association agreement *(Loi du 1er juillet 1901 relative au contrat d'association)*

Municipalities or groups of municipalities are entitled to challenge administrative sanctions issued for the infringement of provisions on classified installations. Pursuant to the French doctrine, their interest is defined based on the degree of exposition to potential nuisances from the installation and not only because the installation is on their territory. This is why the *locus standi* of municipalities was extended to foreign municipalities. For instance in the *Mines de Potasses d'Alsace* case the Council of State considered that some municipalities in Netherlands relying on Rhine water were entitled to challenge Orders of the Prefects related to the discharge carried out by a mining installation in the Rhine river.[85]

3. Judicial procedure (if relevant-with a focus on criminal sanctions)

3.1 General information

3.1.1 Initiation of a case and standing issues

The Public Prosecutor

As already mentioned above, when inspectors for classified installations identify infringements that could lead to a criminal sanction, they transmit this information in their formal record to the Public Prosecutor who decides whether or not to prosecute. The judiciary police *(la police judiciaire*) is also entitled to transmit identification of potential infringements to the Public Prosecutor (See Article L.514-13 of CoE).

Victims

Victims of the infringements can also provide allegations against the operators of classified installations before the Criminal Court *(Tribunal correctionnel)* or the Police. They also have the option to become private parties *(partie civile)* and file a claim before the Public prosecutor *(juge d'instruction*). Article 2 of the Code of Criminal Procedure, however provides that victims can bring this claim only if they have personally suffered damage directly caused by the offence. The jurisprudence strictly applies this causal link because it considers that criminal proceedings initiated by private parties shall remain the exception.

Environmental associations as potential victims

Before the entry into force of the Law of 2 February 1995 *(loi Barnier)*[86], environmental associations were not entitled to initiate criminal proceedings if they did not prove that criminal environmental offences were affecting the assets of the association. This requirement impeded them to initiate criminal proceedings since most of the time it was not their patrimony that was affected but their collective interest (e.g. the protection of the environment). Such situation has changed with the application of this Law, codified in Article L.142-2 of the CoE, which facilitates the initiation of criminal proceedings by environmental protection associations.

Pursuant to this Article, environmental associations declared for at least five years are entitled to initiate criminal proceedings, as private parties, against alleged infringements of provisions on classified installations if their Statutes include the safeguarding of one of the following interests: convenience of the neighbourhood, public health and safety, agriculture, protection of nature and the environment, conservation of sites and monuments or elements of the archaeological heritage.

[85] CE, *mine de potasses d'Alsace*, 15 October 1990 N° 80523

[86] Law n°95-101 of 2 February 1995 on the enhancement of environmental protection *(Loi n°95-101 du 2 février 1995 relative au renforcement de la protection de l'environnement)*

This Article also provides that approved associations, may exercise the rights recognised as those of the private parties with regard to acts which directly or indirectly damage the collective interests that they defend and which constitute an infringement of the legislative provisions relating to the protection of nature and the environment, to the improvement of the living environment, to the protection of water, air, soils, sites and landscapes, to town planning, or those whose purpose is the control of pollution and nuisances, and of the enactments for their application. These infringements would thus include criminal offences related to classified installations.

In other words, this provision gives the opportunity to almost all environmental associations to be constituted as private parties and to initiate criminal proceeding against infringements of provisions on classified installations.

Administrative bodies as potential victims

Several administrative bodies involved in the management of the environment such as:

- the Environment and Energy Management Agency *(L'Agence de l'environnement et de la maîtrise de l'énergie*);
- the Coastal Protection Agency *(le Conservatoire de l'espace littoral et des rivages lacustres);*
- Water Agencies *(les agences de l'eau);*
- the National Hunting and Wildlife Office *(l'Office national de la chasse et de la faune sauvage);*
- the National Monuments Centre *(le Centre des monuments nationaux)*;
- Chambers of Agriculture *(les chambres d'agriculture);*
- Regional Parks *(les parcs régionaux)* and
- Regional Forest Ownership Committees *(les centres régionaux de la propriété forestière);*

may also exercise the rights recognised as those of the civil party at a criminal court in relation to the acts constituting an infringement of the provisions relating to classified installations (See Article L.132-1 of the CoE).

3.1.2 Timing

The time period to issue a criminal sanction varies a lot depending on the specificities of each case. Where the infringements are already identified (e.g. through an official record from inspectors), the alleged offender shall thus directly appear in Court and a first judgement can be issues within one year or 18 months. Where the infringements are not clearly identified and the Public prosecutor *(le juge d' instruction)* shall further investigate, the first judgement can take place four or five years after the infringement. This is mainly due to the fact that several acts taken by the Public prosecutor during the investigation phase *(l'instruction)* can be challenged and subject to an appeal procedure.[87]

[87] Huglo Lepage & Partners, *Criminal Penalties in EU Member States' environmental law* (2003)

It is important to note that the French legislator established in 2004 a 'plead guilty' procedure which is applicable to persons who have committed a crime punishable by a fine or imprisonment for a time period not exceeding five years. The sanctions for the infringement of classified installations fall within the scope of this procedure (e.g. to operate a facility without authorisation can lead for individuals to a fine of up to Euros 75,000 and/or one year imprisonment). Under this procedure the Public Prosecutor can directly propose without trial one or several penalties to a person (including legal persons) that admits the facts and the infringements. The imprisonment penalty proposed by the Public Prosecutor cannot be superior to one year and cannot exceed half of the time period of the one prescribed by law. S/he can also propose a suspension of enforcement. If the offender agrees on the proposal of the Public Prosecutor, this proposal shall be homologated by the President of the Tribunal the same day the proposal was issued. This homologation has the same effect than a judgement (See Articles 495-7 to 495-16 of the Code of Criminal Procedure). Overall this procedure is much faster than the normal criminal procedure.

3.2 Possibilities of appeal

All criminal judgements can be appealed, and the decisions taken by Courts of Appeal *(Chambres correctionnelles des Cours d'appel)* can also be brought to the highest Criminal Court (la chambre criminelle de la cour de cassation) that judges in law. Pursuant to Article 498 of the Code of Criminal Procedure, appeals to the Courts of Appeal shall be issued within 10 days after the judgement was pronounced. Pursuant to Article 568 of the Code of Criminal procedure the decision to appeal the judgement of the Court of Appeal to the highest criminal court shall be issued within five days after the decision of the Court of Appeal was pronounced.

4. Synergies between administrative and criminal procedures

Both administrative and criminal sanctions can apply for the infringement of the legislation on classified installation in France. These sanctions can be imposed separately on the offender and even be cumulative. For instance the non-respect of the requirement set in the letter of formal notice issued by the prefect to close an installation or suspend its activity can both lead to an administrative sanction (Article L.514-1 of the CoE) and a criminal sanction (Article L.514-11 of the CoE). The Constitutional Council considers that the rule of *non bis in idem* does not prohibit the combination of criminal and administrative sanctions incurred for the same facts since these sanctions do not have the same purpose and the interests they aim to safeguard are not identical. The Constitutional Council, however, provides that this cumulation of administrative and criminal sanctions shall be subject to the principle of proportionality. For instance, the total amount of administrative fines and criminal fines issued for the same facts shall not exceed the highest amount possible between these two penalties.[88]

5. Conclusions

Proportionality

Administrative sanctions, issued by the Prefect are: the suspension of the operation, the closure or removal of the installation, the sealing of the installation, the deposit of a sum corresponding to the cost of the work to be carried out and the enforcement ex officio of the measures required. Prefects can apply the appropriate sanction for each specific infringement. Such approach can be assessed as fulfilling the criterion of proportionality.

[88] Constitutional Council Decision No ° 89-260 DC of 28 July 1989, § 16-22.

The criminal offences related to the infringement of classified installations are very detailed in the CoE. Each of these specific offences has corresponding sanctions that can drastically differ from one to another. For instance the failure to notify modifications to the facility can lead to a fine up to Euros 1,500 while the operation of an installation without authorisation can lead to a fine up to Euros 75,000 and up to one year imprisonment. Furthermore Judges have leeway in the setting of criminal sanctions (e.g. up to certain amount or up to certain time-period of imprisonment). Criminal sanctions for the different infringement of provisions related to classified installations should thus be considered proportionate.

Effectiveness

The letter of formal notice is considered by the jurisprudence as a 'guaranty or last warning' for operators enabling them to regularise their legal situation before the issuance of sanctions. This approach is quite effective since almost all operators comply with the requirements set in the letter of formal notice, (for instance, in 2006, only 10% of letters of formal notice related to infringement on classified installations ended-up in an administrative sanction). Specific provisions are set in the CoE that facilitate appeals against administrative decisions related to classified installations by environmental associations and municipalities or groups of municipalities. The role of environmental associations and municipalities in the administrative procedure can concur to a more effective application of administrative sanctions.

Environmental associations, together with several administrative bodies involved in the management of the environment can be constituted private parties and take part in the criminal proceedings against infringements of provisions on classified installations. In 2004, the French legislator also established a plead-guilty criminal procedure. The majority of the criminal sanctions related to classified installations can be dealt with under this procedure which is much quicker than the normal one. The involvement of these private parties in the criminal procedure and the setting of the guilty plea procedure may lead to a more effective application of criminal sanctions related to the infringement of provisions on classified installations.

Dissuasiveness

The administrative sanctions are quite stringent (e.g. the closure or removal of the installation) although they do not comprise fines. The criminal sanctions can lead to a fine up to Euros 75,000 (Euros 375,000 for legal persons) and one year of imprisonment plus specific sanctions for legal persons (e.g. the final closure or a suspension of the installation for a period of five years). Administrative and criminal sanctions can be cumulative. This possibility reinforces their dissuasiveness.

Case studies

Introduction

Information on the two cases was provided by Inspector of IPPC installations of the DRIRE[89] respectively in charge of the Region Languedoc Roussillon and Picardy.
In the first case study, the sanctioning procedure started in January 2001 and ended by a decision of the Criminal Court in April 2010. The operator was considered guilty but the Court decided not to impose a sanction because in the meantime the operator regularised the situation. The sanctioning procedure here was unusually long, more than 9 years. This example demonstrates the necessity for inspectors to have some sanctioning power. This may reduce the length of the sanctioning procedure for IPPC installations in France.
In the second case study, the sanctioning procedure started in December 2005 and ended-up by a criminal sanction issued by the Court in June 2007 almost two years and a half. In the meantime the Prefect requested in April 2006, an administrative sanction which was the suspension of the activity until the operator regularised the situation. This administrative sanction was very effective and the operator quickly complied with the law. This example shows that even though administrative sanctions may not have the dissuasiveness of criminal sanctions, they seem however to be more effective. The sanctioning administrative procedure is less time consuming and more flexible than the criminal procedure.

Case study 1: enforcement procedure for operating without authorisation

Timeline of the procedure

Description of the background

The facility is established since 1986 in the outskirts of Nimes in an industrial zone. It produces and stocks chemical and maintenance products (e.g. liquid soap, swimming pool products, demineralised water). It employs 35 persons. In 2007 it had a turnover of Euros 17 million.

Legislation applicable

This installation requires an authorisation under Title V of the Code of the Environment on classified installation. It is an IPPC installation.

Administrative procedure

In December 2000, an accidental spill of chemicals in the facility caused water pollution in a nearby river. This accident triggered an inspection from the DRIRE of the Languedoc Roussillon Region. This inspection revealed that the facility undergone substantial changes since 1986 and that some of its

[89] General Directorate of Industry, Research and Environment *(Direction Générale de l'Industrie de la Recherche et de l'Environnement)*

activities were falling under the IPPC authorisation regime.[90] The facility, however, was operating without IPPC authorisation.

In January 2001, the Prefect (the representative of the State in the Regions) issued a letter of formal notice requiring the facility to:

- Regularise activities falling under the regime of the IPPC authorisation (storage of flammable liquids, filling facilities, unloading tanks and storage warehouses for plastics);
- Stop the unloading of truck tanks (unauthorized installation and not designed for that purpose);
- Change the design of the area where truck tanks are unloading.

The operators did not comply with the letter of formal notice. However, the prefect did not issue administrative sanctions. Besides, the Inspection Department did not submit a formal record *(procès-verbal)* of the infringement to the Public Prosecutor *(Procureur de la République).*[91]

Only in September 2007, the operator of the facility submitted an application for authorisation to the Prefect. The Prefect sent the application to the Inspection Department for evaluation. The authorisation dossier was considered incomplete and not admissible by the Inspection Department.

In October 2007, the Inspection Department in accordance with Article L-514-13,[92] reported to the Public Prosecutor the infringement of the following Articles of the Code of the Environment:

*Article L512-1:*The facilities that present serious hazards or drawbacks for the interests referred to in Article L. 511-1 [e.g. hazards or drawbacks for public health and safety, or for agriculture, or for the protection of nature and the environment] are subject to authorisation by the Prefect. The authorisation may be granted only if these hazards or drawbacks can be prevented by measures which are specified by the Prefect […].

Article L.511-1: When a classified facility is operated without the declaration or authorisation required by virtue of the present Title, the Prefect serves the operator with official notice to regularise the said situation before a given date limit, by submitting, as applicable, a declaration or an authorisation application […].

This formal record also mentioned that these infringements could lead to the sanctions covered by the following Articles of the Code of the Environment:
Article L.514-9-1: The operation of a facility without the authorisation required is punishable by one year's imprisonment and a fine of Euros 75,000.
Article L.514-11-2: The continued operation of a classified facility while failing to comply with the summons to meet, within a set time, the technical stipulations determined for the application of Articles L. 512-1 [on the obligation of authorisation] […] is punishable by six months' imprisonment and a fine of Euros 75,000.

Result of in-situ analyses requested by the Inspection Department in 2003 showed a pollution of the underground water below the facility by hydrocarbon and ethyl alcohol. In December 2007 the Prefect required the operator of the facility to take urgent necessary measures to stop this water pollution.[93] These measures were consequently taken by the operator.

[90] This facility registered in 1986 under the declaration regime. There are no inspection requirements for facilities falling under this regime.
[91]The Public Prosecutor is in charge of deciding whether or not criminal proceedings must be initiated.
[92]Official translation of Article L514-13: Infringements are officially reported by officers of the judiciary police and classified facility inspectors. These reports are drawn up in duplicate, one copy being sent to the Prefect and the other to the Public Prosecutor. They have probative force unless proven otherwise.
[93]This decision was based on Article L512-7 of the Code of the Environment.

A new application for authorisation was submitted to the Prefect in June 2008. It was again considered as incomplete and not sufficiently developed by the Inspection Department. The Prefect issued a letter of formal notice requiring the facility to comply with all legal requirements on classified installation within a time period of three months.

A new application was submitted to the Prefect in February 2009. The Inspection Department's assessment concluded that the data used related to the emission of solvents were wrong. The Inspection Department required the operator to set a management plan on emission of solvents to justify that they were complying with the relevant emission limit values requirements.

In March 2009, the operator has provided the Inspection Department with a management plan of solvents.

In May 2009, the operator submitted to the Prefect a new application dossier for an IPPC authorization. This dossier was considered acceptable and the public enquiry procedure did not reveal any opposition against the authorization. The authorisation was granted end of 2009.

Criminal procedure

The Department of Inspection in charge of classified installations issued in 2007 a formal record mentioning several infringements to the legislation on classified installations to the Public prosecutor of the Republic. Inspectors considered that there was ground for starting a criminal procedure. The Public Prosecutor decided to initiate a criminal procedure against the operator (natural person) of the facility. No civil parties were involved in the criminal proceedings. The Criminal Court of Nimes pronounced its judgment in June 2010. No appeal was lodged against the decision of the Court.

Information on the sanction

The operator was considered guilty by the Criminal Court of Nimes *(le Tribunal correctionnel)* for the infringement to Articles L.512-1 and L.511-1 of the Code of the Environment (quoted above) for operating a facility without an authorisation and for not complying with the letter of formal notice of the Prefect. However, no sanction was imposed on the operator. The Court decided not to impose sanctions considering the fact that the facility was already complying with the legislation on classified installations before the end of the criminal procedure.

Effectiveness

The interviewee stressed that sanctions could be more effectively applied if inspectors were empowered to issue sanctions like pecuniary fines instead of being only limited to submit formal records to the Public Prosecutor and the prefect. It pointed out that the criminal procedure could sometimes be quite long and thus limit the efficiency of the sanctions. For instance in this specific case the inspector transmitted a formal record to the Public Prosecutor in 2007 and the Criminal Court issued its decision only in 2010, three years later.

He also stated that the role of civil parties in the criminal procedure could be a factor of effectiveness. He mentioned that civil parties were not sufficiently involved in the criminal procedure because they were not aware of the official records submitted by the inspectors to the Public Prosecutor. He

Official translation of Article L512-7: In order to protect the interests referred to in Article L. 511-1, the Prefect may order the evaluations to be conducted or the remedies to be implemented which are rendered necessary either by the consequences of an accident or an incident occurring in the facility, or by the consequences of a failure to comply with the conditions imposed by the present Title, or by any other hazard or drawback interfering or threatening to harm the aforementioned interests. These measures are set out in rulings issued, except in case of an emergency, after an opinion has been given by the competent advisory commission on the level of the department.

underlined that these documents were publically available on request but were not published on internet or posted in a public place.

Proportionality

The interviewee underlined that as 'an internal rule' formal records of infringements to the legislation on classified installations were only submitted to the Public Prosecutor if there was a potential threat for health and the environment. Similarly it mentioned that administrative sanctions such as the suspension of the activity were more likely to be issued when there was no sign of cooperation from the operator to comply with the letter of formal notice and that this non-compliance could potentially lead to a threat for human health and the environment.

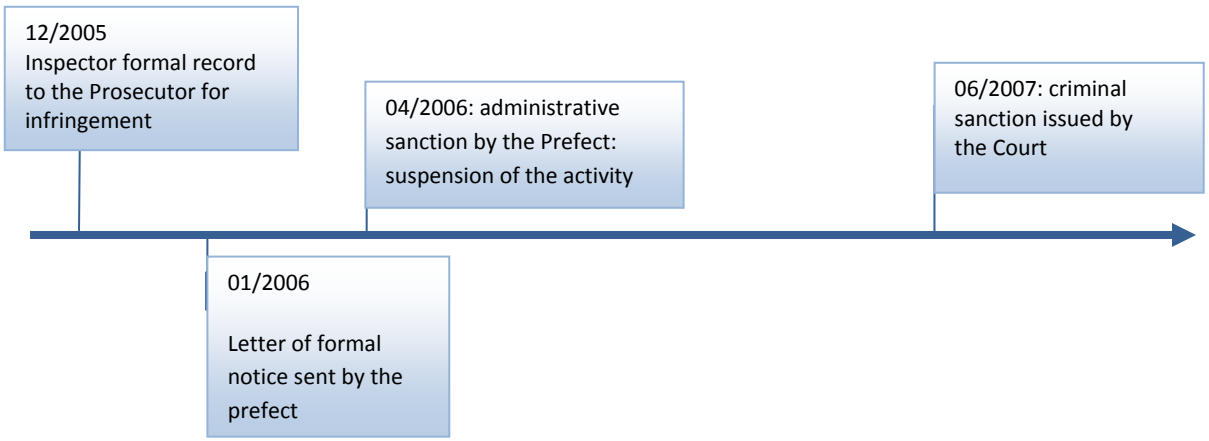
As a general conclusion the interviewee underlined that the protection of human health and the environment was the main priority of inspectors. If there was no such threat and the operators were willing to comply with the legislation it would be unlikely that an administrative or criminal procedure would be initiated. This is mainly to limit the impact of the sanction on other interests such as the economic situation of the facility and its employees.

Dissuasiveness

According to the interviewee, the behaviour of the operator changed from the moment he was aware of the formal record submitted to the Public Prosecutor for the infringement to the legislation on classified installations. The operator pro-actively requested the grant of an IPPC authorisation to comply with the legislation on classified installations. The interviewee also noted that the initiation of the criminal procedure in the case mentioned above had a deterrent effect on the other operators of classified installations in the nearby areas.[94]

Case Study 2: administrative and criminal sanctions for operating without authorisation

Timeline of the procedure



Description of the background

[94] The interviewee explained that part of the deterrent effect was due to the notoriety of the operator of the facility who was the representative of the employer association in the Region Languedoc Roussillon.

The installation is a landfill of non-hazardous waste. When it first started operating in 1998 the site was authorised to store 28,500 tons per year of waste. Now it is authorised to store 100,000 tons per year. It is one of the three main treatment centres of household waste in the L'Aisne (a French Region at the North of Paris). Its activity was extended several times, the last extension being in 2008.
A first IPPC authorisation was granted for three sections of the landfill site. When these sections were full the operator built another section without requiring an authorisation. This section was authorised retrospectively but for a limited period of time. The operator then requested an authorisation for ten sections. An authorisation was granted for these ten sections. The operator started building these ten sections but could not finish on time and therefore continued operating the newly built section even though the time period for the authorisation ended. In other words this section was used without authorisation.

Legislation applicable

This installation requires an authorisation under Title V of the Code of the Environment on classified installation. It is an IPPC installation falling under Point 5.4 of Annex I to the IPPC Directive.[95]

Procedure

In December 2005 the Department of Inspection of the DRIRE in Picardy visited the site of the facility. The inspectors discovered that one section of the landfill was in use without authorisation. A formal record was sent to the Public Prosecutor mentioning this infringement. The gendarmerie (a military force charged with police duties among civilian population) heard the operator. The Public Prosecutor sought the opinion of the Department of inspection. He/she finally decided to initiate criminal proceedings against the operator.

Beginning of 2006, the Prefect sent a letter of formal notice to the operator with an injunction to regularise its legal situation. In April 2006, since the operator did not comply with the letter of formal notice, the Prefect decided, as an administrative sanction, to suspend the operation of the section until an authorisation was granted.
In June 2007, the case was heard at the Criminal Court who issued its decision in September 2007. The operator was considered guilty to operate a facility without authorisation and was imposed a criminal fine of Euros 10,000.

General comments on sanctions

The interviewee considered that the operation of an installation without an authorisation was one of the most serious offence *(délits)* related to the legislation on classified installations. This offence could lead to one year's imprisonment and a fine of Euros 75,000. This is the reason why the Public Prosecutor decided to initiate criminal proceedings at the Criminal Court *(Tribunal Correctionnel)* which is dealing with offences and not at the Police Tribunal *(Tribunal de Police)* which is dealing with petty offences *(contravention).*

He pointed out that compared to other countries inspectors of IPPC installations in France did not have sanctioning power.

Effectiveness

The interviewee underlined that the criminal sanction was issued after the infringement ended. The operator was granted an authorisation before the decision of the Criminal Court was issued. He

[95]Landfills receiving more than 10 tonnes per day or with a total capacity exceeding 25,000 tonnes, excluding landfills of inert waste.

considered that the administrative sanction, to suspend the operation of the activity by the Prefect until the authorisation was granted, was very effective since the operator promptly regularized its situation.

Proportionality

Pursuant to Article L.514-9 of the Code of the Environment, the operation of a facility without the authorisation required is punishable by one year's imprisonment and a fine of Euros 75,000. In that case the Criminal Court decided to impose a criminal sanction on the operator of Euros 10,000. The interviewee indicated that the sanctions and their level were never motivated by the Court. He, however, supposed that the sanction was not so high because the operator regularized its situation before the end of the criminal procedure. He also mentioned that the fact that incoming household waste had to be treated anyway might have been considered as a mitigating circumstance, to operate a section without authorisation.

Dissuasiveness

The interviewee said it was extremely difficult to assess the dissuasiveness of such a sanction on the operator and on operators of similar installations. He, however, mentioned that inspectors visited the site several times (two to three visits per year) since the issuance of the sanction and they did not notice any infringements to the legislation on classified installations.

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Annex III- Germany

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in Germany

Executive Summary

In Germany, measures to respond to infringements of IPPC related obligations consist of administrative (quasi) criminal penalties, criminal penalties and administrative measures. Whereas the penalties aim to punish the perpetrator, administrative measures are aimed to prevent or eliminate infringements of IPPC-related obligations.

The Federal Immission Control Act, the Federal Waste Management Act and the Federal Water Act mainly transpose the IPPC Directive and provide for administrative (quasi) criminal sanctions in relation to almost all IPPC related obligations.

The legislation of the 16 Federal States (Länder)[96] complements the transposition of the IPPC Directive and provides for a few additional administrative criminal penalties for infringements.

Federal and Länder administrative (quasi) criminal penalties range from Euros 5 to 50,000. Irrespective of this, the fine should be higher than the economic benefit that the perpetrator has drawn from the perpetration of the administrative (quasi) criminal offence. Hence, a fine may be much higher than Euros 50,000.

In the light of the discretionary principle, it is left to the discretionary power of the competent regulatory authorities, whether or not they prosecute an administrative (quasi) criminal offence.

The environmental criminal law, regulated on the federal level, punishes infringements of major IPPC-related obligations, e.g. infringements of the permit requirement, with up to three years of imprisonment or a fine. In addition, the general environmental criminal law punishes infringements of IPPC-related obligations, if these infringements cause significant damage to the environment, i.e. flora and fauna, soil, water or air with up to five years of imprisonment or a fine. In application of the principle of mandatory prosecution, the regional public prosecution offices must prosecute criminal offences.

The Federal Immission Control Act provides the competent regulatory authorities of the Länder with various measures to enforce compliance with IPPC related obligations, the most stringent of which are the closure or removal of the installation and the withdrawal of the permit. The Federal Waste Management Acts of the Länder provide for similar measures in relation to IPPC landfills. A permit to discharge waste water from IPPC installations (or a permit for other IPPC related water usages) can be withdrawn on the basis of the Federal Water Act.

To monitor the operator's compliance, the competent authorities of the Länder are entitled to inspect the installation and the operational premises, to audit operational documents and to take samples without prior notification to the operator. The operator is obliged to cooperate with the inspectors and to provide them with the requested information. Operators can challenge administrative (quasi) criminal penalties and criminal penalties before the criminal courts and administrative measures before the administrative courts. In the case of administrative (quasi) criminal penalties and administrative measures, the procedural rules require that the administrative decision is first reassessed by an administrative authority before a court procedure may be initiated (hierarchical recourse).

[96] This study not exhaustively reflects the Länder legislation, but presents examples of different Länder. It focuses on the legislation of North-Rhine Westphalia.

Neither individuals nor non-governmental organisations are entitled to join the administrative (quasi) criminal or the criminal procedure. Neighbours are entitled to challenge a permit for an IPPC installation if this installation violates their property rights or health. The Court of Justice of the European Union decided with judgement[97] of 12 May 2011 that the national legislation regulating the standing of non-governmental organisations in court procedures infringes Directive 2003/35/EC and that, as a minimum, non-governmental organisations must have standing to enforce all national provisions based on European environmental legislation.

The table below indicates the Articles of the IPPC Directive covered by sanctions/measures in Germany.

Table 1: Enforceable provisions covered by penalties in Germany

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	§ 17 BImSchG [98]	-	-
4	§ 20(1) BImSchG § 20(2) BImSchG	§ 327(2) no.1 and no.3, (3) StGB	§ 62(1) no.1 and (3) in conjunction with § 4 and § 16 Federal Immission Control Act (BImSchG) §§ 61(1) no.2a, § 31(2) of the Federal Waste Management Act (KrW-/AbfG) § 41(1) no.1 of the Federal Water Act.
5	-	-	§ 62(1) no.1 and (3) in conjunction with § 4 and § 16 Federal Immission Control Act (BImSchG) §§ 61(1) no.2a, § 31(2) of the Federal Waste Management Act (KrW-/AbfG) § 41(1) no.1 of the Federal Water Act.
6	-	-	§§ 4, 4a of the Federal Ordinance on the Permit Procedure (9.BImSchV) §§ 73(1) of the Administrative Procedure Acts of the Länder
12 (1)	§ 20(2) BImSchG	-	§ 62 (2) no.1 and (3) in conjunction with § 15(1) BImSchG
12 (2)	§ 20(2) BImSchG	§ 327(2) no.1 and no.3, (3) StGB	§ 62 (2) no.1 and (3) in conjunction with § 15(1) BImSchG
14 (a)	§ 21(1) no.2 and no.3 BImSchG	§ 327(2) no.1 and no.3, (3) StGB	§ 62(1) no.3 and (3) in conjunction with § 8a(2) sentence 2 or 12(1) BImSchG; § 62(1) no. 5 and (3) in conjunction with § 17(1)

[97] Judgement of the European Court of Justice of 12 May 2011, in case C-115/09, Friends of the Earth Germany (BUND) vs. district government Arnsberg.
[98] Compliance with the requirements set by law and the conditions of the permit.

			BImSchG §§ 61(1) no.2b, 32(4) KrW-/AbfG
14 (b)	-	-	§ 62(2) no. 3 and (3) in conjunction with § 31 sentence 1 BImSchG § 27(1) no.27 of the Federal Landfill Ordinance (DepV) in conjunction with § 61(1) no.5 KrW-/AbfG
14 (c)	-	-	§ 62(2) no.4 and no.5 in conjunction with § 62 (3) and § 52 BImSchG § 61(2) no.3 and (3) KrW-/AbfG § 61(2) no.4 and (3) KrW-/AbfG

1. Applicable sanctions

National measures to respond to an infringement of IPPC-related obligations consist of administrative (quasi) criminal penalties, criminal penalties and administrative measures. While administrative (quasi) criminal penalties and administrative measures are regulated in the legislation transposing the IPPC Directive, i.e. the Federal Immission Control Act,[99] the Federal Waste Management Act,[100] the Federal Water Act[101] and the complementing Länder legislation, the criminal penalties are laid down in the German Criminal Code,[102] in the chapter concerning environmental criminal law. Administrative (quasi) criminal penalties and criminal penalties are aimed to punish the perpetrator.[103] Administrative measures, on the other hand, are aimed to prevent or eliminate an infringement of IPPC-related obligations and to restore legality if the infringement has already taken place.[104]

1.1. Administrative (quasi) criminal and criminal penalties

Administrative (quasi) criminal penalties cover the infringements of all enforceable provisions of the IPPC Directive, whereas criminal penalties only cover its main obligations (see Table 1 above). Criminal and administrative (quasi) criminal offences follow the same structure, e.g. they require that the perpetrator committed the offence deliberately or negligently. However, administrative (quasi) criminal offences and environmental criminal offences differ in terms of applicable penalties. Whereas administrative (quasi) criminal offences are punished with a fine, criminal offences are punished with imprisonment and/or a fine.[105] Furthermore, in general, administrative (quasi) criminal penalties are aimed to punish petty offences while criminal penalties are applicable in the case of more severe crimes.[106]

To differentiate exactly between administrative (quasi) criminal and criminal penalties is important, because criminal law and administrative (quasi) criminal law diverge in many aspects. Some penalties are only available under criminal law, e.g. imprisonment or the ban to carry out a certain profession. In addition, where it is left to the discretionary power of the competent authority to prosecute an administrative (quasi) criminal offence (§ 47 of the AdministrativeCriminal Offences Act – OWiG), the public prosecutors are obliged to investigate and prosecute a criminal offence under the principle of mandatory prosecution (§ 152 of the Code of Criminal Procedure – StPO). Finally, the procedural rules are regulated in different procedural acts and differ substantially. The procedural rules for the prosecution and punishment of administrative (quasi) criminal offences are regulated in the Administrative Criminal Offences Act and the procedural rules for the prosecution and punishment of criminal offences are regulated in the Code of Criminal Procedure.[107] This section at first outlines the applicable administrative (quasi) criminal penalties and in its second part deals with IPPC-related criminal penalties.

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[99] Federal Immission Control Act in the version promulgated on 26 September 2002 (Federal Law Gazette 2002, I p. 3830) last amended by article 3 of the Act of 1 March 2011 (Federal Law Gazette 2011, p. 282) – *Bundesimmissionsschutzgesetz*.

[100] Federal Waste Management Act of 27 September 1994 (Federal Law Gazette 1994 I p. 2705), last amended by article 8 of the Act of 11 August 2010 (Federal Law Gazette 2010 I p. 1163) – *Kreislaufwirtschafts- und Abfallgesetz.*

[101] Federal Water Act of 31 July 2009 (Federal Law Gazette I p. 2585), last amended by Articel 12 of the Act of 11 August 2010 (Federal Law Gazette 2010 I p. 1163) – *Wasserhaushaltsgesetz*

[102] German Criminal Code in the version promulgated on 13 November 1998 (Federal Law Gazette 1998 I p. 3322), last amended by article 4 of the Act of 23. June 2011 (BGBl. I 2011 p. 1266) – *Strafgesetzbuch*

[103] Milieu and Huglo Lepage; *National Study on Germany as part of the Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member Länder*; p. 14.

[104] Ibid.

[105] Mitch, *Law of administrative (quasi) criminal offences*, § 3 paragraphs 4 and 5.

[106] Mitch, *Law of administrative (quasi) criminal offences,* § 3 paragraph 7; Bohnert, *Law of administrative (quasi) criminal offences, layout for practioners and students,* A. II. 1.

[107] With regard to the practical differences between criminal and administrative (quasi) criminal law see: Mitch, *Law of administrative (quasi) criminal offences*, § 3 paragraph 1.

1.1.1. Administrative (quasi) criminal penalties

The Federal Immission Control Act, the Federal Waste Management Act and the Federal Water Act mainly transpose the IPPC Directive and set the applicable administrative (quasi) criminal penalties.

Most IPPC installations are subject to the permit procedure under the Federal Immission Control Act that sets the regulatory framework for the protection from emissions into the air. Therefore, this act includes most of the administrative (quasi) criminal penalties for infringements of IPPC related obligations. Some sanctions are also regulated in the Federal Waste Management Act and the Federal Water Act that set the regulatory framework for the management of waste and the protection of water bodies and complement the Federal Immission Control Act in transposing the IPPC Directive.

Only IPPC landfills are subject to the permit procedure under the Federal Waste Management Act. This act and the Federal Landfill Ordinance set the main regulatory requirements for IPPC landfills and sanction infringements of IPPC related obligations. Complementary obligations and sanctions are regulated in the Federal Immission Control Act and the Federal Water Act.

In order to comply with the water related IPPC requirements operators of all IPPC installations need a permit for the discharge of waste water from these installations and for additional water usage under the Federal Water Act; the discharge of waste water and the usage of water without permit is sanctioned. Besides penalties, as additional measure to limit the discharge of waste water, Germany has adopted a waste water charge (Federal Waste Water Charges Act – AbwAG). The scale of this charge depends on the types of polluting substances concerned.

The administrative (quasi) criminal penalties cover almost all infringements of national obligations transposing the IPPC Directive. The applicable fines ('*Bußgelder*') range from Euros 5 to Euros 50,000. Whereas severe offences are sanctioned with maximum fines of Euros 50,000 (e.g. the operation without a permit) less severe offences are sanctioned with maximum fines of Euros 10,000 (e.g. the non-provision of information to inspectors). In case of a negligent perpetration the scale of the fine is reduced by half. Legal persons can be fined to the same extent as individuals if their representatives commit the offence.

The amount of the fine imposed on the perpetrator for committing a specific offence is determined by an assessment of the severity of the offence, the level of guilt of the perpetrator and his financial situation (§ 17(3) OWiG). Irrespective of these criteria, the fine should be higher than the economic benefit that the perpetrator has drawn from the perpetration of the administrative (quasi) criminal offence. Hence, a fine may be much higher than Euros 50,000 (§ 17(4) OWiG). 'Should' must be interpreted so that the competent authority is required to apply this rule in typical cases, however, is enabled to derogate from it in a-typical cases.

In addition, the Länder specifies the scale of fines by adopting indicative catalogues of fines. According to the catalogue of fines for infringements against environment related provisions of North-Rhine Westphalia ('*Bußgeldkatalog Umwelt*') of 2006[108] the scale of fines for the construction of installations (including IPPC) without permit (i.e. unauthorised construction) depends on the value of the constructed installation:

- If the value of the installation is less than Euros 50,000 ,the fine ranges between Euros 510 and 2,600;
- If the value of the installation is between Euros 50,000 and 500,000 ,the fine ranges between Euros 510 and 5,100;

[108] The fine catalogue environment of North-Rhine Westphalia of 2006 was established by the Ministry for the Environment, Nature Conservation, Agriculture and Consumer Protection of North-Rhine Westphalia and is available at: http://www.kreisjaegerschaft-coesfeld.de/red/ges-bussgeldkatalog-umwelt-nrw-2010-02-27.pdf

- If the value of the installation is between Euros 500,000 and 5,000,000 ,the fine ranges between Euros 2,600 and 25,600; and
- If the value of the installation is more thatn 5,000,000 , the fine ranges between 5,100 and 50,000.

The catalogue contains indicative fines for many other infringements.

To enforce the payment of the fine the convicted person may be arrested for a maximum of six weeks if one offence has been committed and for a maximum of three months if several offences have been committed (§ 96 OWiG). However, these measures only serve to enforce the punishment and are not measures of punishment per se. The alleged perpetrator has two weeks to appeal against the fine after he has received the fine notice. If he does not appeal against the fine, he must pay the fine four weeks after the receipt of this notice (§ 66 OWiG).

Note that the Länder legislation includes complementary legislation to transpose the IPPC Directive that also provides for administrative (quasi) criminal sanctions. All 16 Länder have adopted laws that regulate the requirement to provide for an emission declaration in relation to the discharge of waste water. Some laws sanction the lack of, late or incorrect notification of this declaration to the competent authority with a fine (e.g. § 14 of the Bavarian IPPC-Wastewater-Ordinance that provides for a fine of up to Euros 5,000). In addition, some of the waste management acts of the Länder provide for complementary provisions and sanctions, e.g. the failure to report accidents of IPPC landfills and other IPPC waste disposal facilities to the competent authority is sanctioned by North-Rhine Westphalia with a fine of up to Euros 50,000 (§ 44(1) no.9 and (2) of the Waste Management Act of North-Rhine Westphalia).

1.1.2. Criminal penalties

The environmental criminal law sanctions the operation of or significant changes to an IPPC installation without permit or the infringement of essential permit requirements,[109] e.g. infringements of mandatory emission limit values (§ 327(2) no.1 (3) of the Criminal Code – StGB).[110] In case of an intentional perpetration of these offences the penalty is imprisonment for a maximum of three years or a maximum fine of 360 daily units and, where legal persons are liable for their representatives, up to an amount of Euros 1,000,000. In case of negligence the penalty is imprisonment for a maximum of two years or a maximum fine of 360 daily units and, where legal persons are liable for their representatives, up to an amount of Euros 500,000. The same penalties apply to operators that run a landfill in the meaning of the Waste Management Act without a permit or in non-compliance with essential permit requirements (§ 327(2) no.3, (3) of the national Criminal Code).

If these offences are committed under aggravated circumstances the punishment is between six months and 10 years (§ 330(1) no.1 StGB). Environment-related aggravated circumstances are met if the unauthorised operation is carried out deliberately and seriously and permanently pollutes a river, soil or protected areas, if it endangers the water supply or, lastly, if endangered species of fauna and flora are permanently damaged.

It is left to the discretionary power of the criminal judge to determine the penalty taking into account the severity of the crime and the personal guilt of the perpetrator. In relation to the financial penalties the judge is entitled to impose penalties between a minimum of three and a maximum of 360 daily units. The judge determines the amount of one daily unit while taking into account the economic background of the convict. The amount of one daily unit is a minimum of Euro one and a maximum of Euros 30,000.

[109] See Fischer, *Legal commentary to the Criminal Code*, § 327 paragraph 12.
[110] Ibid.

Additionally, German environmental criminal law contains a number of provisions (§ 324-330d StGB) that sanction the violation of administrative provisions if these violations lead to serious negative impacts on the environment. In accordance with § 325(1) of the Criminal Code for example the operation of an installation in violation of duties under administrative law that causes air pollution which can harm human health, animals, plants or other property of significant value shall be punished. The perpetrator is liable to imprisonment for a maximum of five years or a maximum fine of 360 daily units in case of an intentional perpetration and to imprisonment for a maximum of three years or a maximum fine of 360 daily units in case of negligence (liability of legal persons for intentional perpetration: maximum fines of Euros 1,000,000; liability of legal persons for negligence: Euros 500,000).

In addition to penalties, the court is entitled to confiscate the profit of the operator made by the perpetration of the environmental crime (§§ 73 ff. of the Criminal Code).

It is noteworthy that the principle of administrative accessoriness applies to environmental criminal law.[111] In accordance with this principle, the offences are only punishable under the condition that the perpetrator violates an administrative obligation, e.g. operates an installation without a permit. The legitimacy of the application of this principle is controversially discussed in Germany.[112] However, in accordance with the opinion of the national courts and the majority of legal scholars[113] the application of this principle does not breach the Constitution and is considered as legitimate.

It should be also mentioned that the current environmental criminal law is subject to reform in the framework of the transposition[114] of Directive 2008/99/EC on the protection of the environment through criminal law.[115]

Table 2 below indicates the main administrative (quasi) criminal and criminal offences and related penalties applicable at the federal level in Germany for each of the key enforceable obligations under the IPPC Directive.

[111] This principle does not apply in the context of § 330a of the Criminal Code. Under certain conditions this provision sanctions anyone who diffuses or releases substances which contain or can generate poisons.
[112] However, in accordance with the opinion of the national courts and the majority of legal scholars[112] the application of this principle does not breach the constitution and is necessary.
[113] See Thomas Fischer, *commentary to the Criminal Code*, 57 edition 2010, prior to § 324 paragraph 6
[114] The transposition deadline expired on 26 December 2010.
[115] Available at: http://dipbt.bundestag.de/dip21/btd/17/053/1705391.pdf - To initiate the legislative procedure, the federal government submitted its bill to the federal parliament where the bill received its first reading on 7 July 2011. Three readings are necessary before it can be adopted.

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related administrative (quasi) *criminal and criminal penalties in Germany*

	Administrative (quasi) **criminal**		**Criminal**	
	Offences	**Penalties (intentional/negligent)**	**Offences**	**Penalties (intentional/negligent)**
Obligation to apply for a permit for new or existing installations	Intentional/ negligent construction of or making substantial changes to IPPC installations that require a permit under the Federal Immission Control Act without permit. ***§ 62(1) no.1 and (3) in conjunction with § 4 and § 16 Federal Immission Control Act (BImSchG)***	Maximum fine of Euros 50,000/25,000 identical fines for legal persons.	Intentional/ negligent operation of or substantial change to an IPPC installation. ***§ 327(2) no.1 and no.3, (3) StGB***	Maximum imprisonment of 3 years or a maximum fine of 360 daily units/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ Euros 500,000.
	Construction of or substantial changes to landfills without plan approval. ***§§ 61(1) no.2a, § 31(2) of the Federal Waste Management Act (KrW-/AbfG)***	Maximum fine of Euros 50,000/25,000 identical fine for legal persons.		
	Discharge of waste water from installations without a permit. ***§ 41(1) no.1 of the Federal Water Act.***	Maximum fine of Euros 50,000/25,000 identical fine for legal persons.		
Obligation to supply information for application for permits	Obligation to provide specific information for permit application under the Federal Immission Control Act. ***§§ 4, 4a of the Federal Ordinance on the Permit Procedure (9.BImSchV)***	The infringement of these obligations does not lead to sanctions, but as a consequence of this infringement the authority will not grant the permit.	N/A	N/A
	Obligation to provide information within the plan approval procedure for waste facilities that are subject to an Environmental Impact assessment on the other hand. ***§§ 73(1) of the Administrative Procedure Acts of the Länder***			
Obligation to notify the competent authority of any changes in the operation of an installation	Intentional/ negligent non-notification, incorrect, incomplete or late notification of any changes to an installation that requires a permit under the Federal Immission Control Act (not for landfills). ***§ 62 (2) no.1 and (3) in conjunction***	Maximum fine of Euros 10,000/5,000 identical fine for legal persons.	N/A	N/A

	Administrative (quasi) criminal		Criminal	
	Offences	**Penalties (intentional/negligent)**	**Offences**	**Penalties (intentional/negligent)**
	with § 15(1) BImSchG			
Obligation to comply with the conditions set in the permit or mandatory ELVs	IPPC-installations (without IPPC landfills): Intentional/ negligent non-compliance, incorrect, incomplete or belated compliance with enforceable conditions or obligations set in the permit (or a licence for premature beginning) or with subsequent administrative acts that are aimed to enforce the compliance with the requirements of the BImSchG for IPPC installation. ***§ 62(1) no.3 and (3) in conjunction with § 8a(2) sentence 2 or 12(1) BImSchG; § 62(1) no. 5 and (3) in conjunction with § 17(1) BImSchG***	Maximum fine of Euros 50,000/25,000 identical fine for legal persons.	Intentional/ negligent violation of essential requirements of the permit for an IPPC installation. ***§ 327(2) no.1 and no.3, (3) StGB***	Maximum imprisonment of 3 years or a maximum fine of 360 daily units/ maximum imprisonment of 2 years or a maximum fine of 360 daily units, legal persons: Maximum fines of Euros 1,000,000/ 500,000.
	To non- incorrectly, incompletely or lately inform inspectors; to prohibit inspections, non- provision of documents for inspectors in case of inspections; to refuse to allow inspectors to take samples in case of inspections or that they scrutinise the level of emissions. ***§ 62(2) no.4 and no.5 in conjunction with § 62 (3) and § 52 BImSchG***	Maximum fine of Euros 10,000/5,000 identical fine for legal persons.		
	Non-reporting of the results of the measurements of the emissions or non-storing of recordings based on the results of the measuring devices. ***§ 62(2) no. 3 and (3) in conjunction with § 31 sentence 1 BImSchG***	Maximum fine of Euros 10,000/5,000 identical fine for legal persons.		
	Non-, incorrect, incomplete or late reporting to the authority that an accident has taken place (mainly transposes Seveso II Directive).	Maximum fine of Euros 25,000/12,500 identical fine for legal persons.		

	Administrative (quasi) criminal		Criminal	
	Offences	**Penalties (intentional/negligent)**	**Offences**	**Penalties (intentional/negligent)**
	§ 21(1) no.15 and § 19(1) and (2) of the Federal Major Accident Ordinance in conjunction with § 62(1) no.2 and (3) of the BImSchG			
	<u>IPPC landfills:</u> Non-compliance with conditions set in the permit for a landfill or with administrative acts. ***§§ 61(1) no.2b, 32(4) KrW-/AbfG***	Maximum fine of Euros 50,000/25,000identical fine for legal persons.		
	Non-information of the authority should emission thresholds be exceeded, triggering the obligation of the operator of the landfill to inform the competent authority. ***§ 27(1) no.27 of the Federal Landfill Ordinance (DepV) in conjunction with § 61(1) no.5 KrW-/AbfG***	Maximum fine of Euros 50,000/25,000 identical fine for legal persons.		
	Non-reporting to the authority on accidents that lead to a significant malfunction of the landfill operation. ***§ 27(1) no.32 of the DepV in conjunction with § 61(1) no.5 of the KrW-/AbfG***	Maximum fine of Euros 50,000/25,000 identical fine for legal persons.		
	Non-, incorrect, incomplete or late provision of information on landfills and their operation, if requested for by inspectors. ***§ 61(2) no.3 and (3) KrW-/AbfG***	Maximum fine of Euros 5,000/10,000 identical fine for legal persons.		
	To prohibit inspectors from entering the installation, premises or accommodation, auditing operating documents or carrying out technical measurements. ***§ 61(2) no.4 and (3) KrW-/AbfG***	Maximum fine of Euros 5,000/10,000 identical fine for legal persons.		

*ELVs: Emission Limit Value

1.2. Administrative measures

Besides penalties, the national legislation provides for administrative measures to enforce the compliance with the permit and the legislation on IPPC installations (administrative measures).

In urgent cases the police forces of the Länder are entitled to take administrative measures based on the police and regulatory laws of the Länder. These acts enable the police forces to carry out the necessary measures to prevent and eliminate infringements of IPPC related obligations.[116]

In non-urgent cases the competent regulatory authority of the Länder (competent authority) is responsible to address infringements of IPPC related obligations set under the Federal Immission Control Act, the Waste Management Act and the complementary Länder legislation.[117] The most lenient administrative measure to enforce compliance is to order the operator to comply with the requirements set by law and the permit in a formal procedure (§ 17 BImSchG). If the operator continues the unlawful operation, the competent authority has several options to enforce compliance. The competent authority is entitled to stop the operation of an installation if the operator does not comply with the installation related requirements or administrative measures (§ 20(1) BImSchG) until the operator ensures compliance. The competent authority is obliged to close or remove an installation if the installation has been constructed or significantly changed without a permit (§ 20(2) BImSchG). As a further measure, the competent authority can withdraw the permit, e.g. if the operator does not comply with requirements set in the permit or if the authority would be entitled not to grant the permit due to circumstances that have occurred after the granting of the permit (§ 21(1) no.2 and no.3 BImSchG).[118]

It is noteworthy that the competent authority is also authorised to stop the operation of an IPPC installation if it comes to the conclusion that the operator is deemed not trustworthy to run an installation in compliance with provisions ensuring environmental protection and that the cessation of operations is required for the reason of public interest (§ 20(3) BImSchG).

The Federal Water Act entitles the competent authorities to withdraw a permit for the discharge of waste water from IPPC installations and for other installation related water usages under the conditions mentioned in relation to the withdrawal of permits for IPPC installations (§ 18(2) of the Federal Water Act).

Provided that an operator refuses to comply with administrative measures, the competent authority is entitled to coerce the operator to comply with these measures on the basis of the administrative enforcement laws of the Länder.[119] Under these laws the competent authority is entitled to carry out the required measure instead of the operator and charge him with the costs of this operation (substitute performance), to impose a fine ('*Ordnungsgeld*'), to coerce the operator to comply with the measures and, if approved by the court, to take the perpetrator into custody as a last resort. These measures can be applied cumulatively and repeatedly until the operator complies with the measure.

[116] For example § 3 paragraph 1 of the Police and Regulatory Act of Hamburg.
[117] This study only includes administrative measures applicable under the Federal Immission Control Act. The Federal Waste Act does not provide for such a differentiated set of measures. However, it entitles the competent authorities to take all necessary measures to enforce its requirements.
[118] This paragraph only indicates the measures regulated in the Federal Immission Control Act for IPPC installations falling under its scope. Measures in relation to IPPC landfills falling under the scope of the Federal Waste Management Act are regulated in the Länder legislation and are not indicated in this paragraph.
[119] Milieu and Huglo Lepage; *National Study on Germany as part of the Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member Länder*; p. 14.

2. Administrative procedure

2.1. General elements on the legal tradition and potential evolution

Regarding the administrative procedure it must be distinguished between the prosecution of administrative (quasi) criminal offences on the one hand and the issuing of administrative measures that enforce the compliance with IPPC related obligations on the other hand, because they are subject to different procedural rules.

2.1.1 Administrative measures

In urgent cases the police forces of the Länder and in non-urgent cases the competent regulatory authorities of the Länder are responsible for the enforcement of the Federal Immission Control Act, the Federal Waste Management Act and the Federal Water Act. The Länder determine the competent regulatory authority either by legal act (*'Zuständigkeitsverordnungen'*)[120] or by administrative regulation.[121] For example, according to the law that determines the competent authorities in the area of environmental protection of North-Rhine Westphalia[122] the responsibility is divided between the district governments (*'Bezirksregierungen'*)[123] and the counties and cities (*'Kreise und Kreisfreie Städte'*).[124] ´The district governments have jurisdiction to monitor compliance of highly pollutant IPPC installations with the Federal Immission Control Act, e.g. waste incineration plants, chemical installations, energy plants, industrial plants for the production of timber and paper and glass and installations for the production and processing of metals, whereas the counties and cities monitor other IPPC installations.[125]

The administrative procedure acts of the Länder regulate the procedural rules for implementing the administrative measures. In non-urgent cases these laws require the hearing of the operator of an installation before an administrative measure is issued, to provide for a statement of reasons that explains the administrative measure and to inform the addressee of his rights to appeal against the administrative decision.[126]

2.1.2 Administrative (quasi) criminal penalties

The competent regulatory authorities of the Länder also prosecute administrative (quasi) criminal offences (see above). The procedure for the prosecution of administrative (quasi) criminal offences is regulated under the Administrative Criminal Offences Act (*'Ordnungswidrigkeitengesetz'*). These offences are only punishable on the basis of laws that were in force before the perpetration of the offence; their perpetration is only punishable once; and the alleged perpetrator has the right to challenge a fine imposed by the competent regulatory authority before the criminal court.

Due to its proximity to the criminal law, the Administrative Criminal Offence Act frequently refers to the Code of Criminal Procedure that regulates the prosecution of criminal offences. In contrast to the

[120] Brandenburg, Baden-Wuerttemberg, Bremen, Hessen, Mecklenburg-Western Pomerania, Lower Saxony, North-Rhine Westphalia, Rheinland-Pfalz, Saxony, Schleswig Holstein, Saarland and Thuringia adopted legal acts to determine the competent authorities in relation to the Federal Immission Control Act.
[121] These are regulations that specify and substantiate the administrative procedure for the authorities, but have only limited legal effects towards the operator of an installation.
[122] Ordinance on the Distribution of Competences in the Field of Environmental Protection of 11 December 2007 (NRW Law Gazette 2007 p. 662) last amended by the Ordinance of 21 December 2010 (Law Gazette NRW. p. 700) – *Zuständigkeitsverordnung Umweltschutz*.
[123] These are higher authorities in the hierarchy of the Länder authorities that are responsible for environmental protection.
[124] These are lower authorities in the hierarchy of the Länder authorities that are responsible for environmental protection.
[125] See website of the district government Arnsberg: http://www.bezreg-arnsberg.nrw.de/themen/g/genehmigung_anlagen_bimschg/index.php
[126] Compare for example, §§ 28, 39 and 41 of the Administrative Act of North-Rhine Westphalia and § 58 of the Federal Code of Administrative Court Procedure.

criminal procedure it is left to the discretionary power of the competent authority whether or not to prosecute an administrative (quasi) criminal offence and a fine is imposed without a preceding oral hearing.

2.2 Inspections

The Federal Immission Control Act, the Federal Waste Management Act and the Federal Water Act entitle and oblige the competent authorities of the Länder to monitor the compliance of IPPC installations with the regulatory requirements (see above). To enable the competent authorities to carry out the monitoring, owners and operators of installations are obliged to allow inspectors to access installations, the operational premises and, in urgent cases, homes. Inspectors are also entitled to inspect operational documents and to take samples, e.g. to measure emissions.[127]

The competent authorities of the Länder (see section 2) are responsible for carrying out the inspections. Several Länder provide for laws or administrative regulations that complement the inspection requirements of the Federal Immission Control Act,[128] e.g. Mecklenburg-Pomerania, North-Rhine Westphalia and Schleswig-Holstein, that regulate the inspection procedures for IPPC installations falling under this Act.[129] Some laws and regulations require a certain number of announced and unannounced inspections. For example the administrative regulation of Mecklenburg-Pomerania requires regular on-site checks and examinations.[130] The administrative regulation of North-Rhine Westphalia requires the competent authorities to carry out unannounced inspection and to immediately investigate any complaints brought to them about installations.[131] If other authorities of North-Rhine Westphalia learn that an installation is operated in non-compliance with regulatory provisions, these authorities must immediately inform the competent authority. Subsequent to the start of the operation of an installation and after a significant change to an installation, the administrative regulation of North-Rhine Westphalia requires that 'installations should be inspected' by the competent authority.[132] Länder laws also set complementary requirements for the inspection procedure regulated in the Federal Waste Management Act for landfills and in the Federal Water Act for installations discharging waste water.

As regards the human resources allocated to the inspection of IPPC installation, a representative of the district government of Cologne reported that each inspector is responsible for about 25 installations (IPPC and non-IPPC installations) taking into account that more complex installations are covered by a higher average of inspectors. He emphasised that the current number of inspectors is not sufficient to ensure an effective control of IPPC installations, however, that North-Rhine Westphalia plans to increase this number. According to a representative of the Länder Agency for Agriculture, the Environment and Rural Areas of Schleswig-Holstein, 250 IPPC installations are covered by 10 to 15 persons.

Actual figures of the financial resources allocated to the inspection of IPPC installations are not available.

[127] § 52 BImSchG and § 40 KrW-/AbfG.
[128] Administrative regulations are procedural rules for authorities that have no external effect.
[129] Federal Republic of Germany, *Report on the recommendations of the European Parliament and the Council from 4 April 2001 to identify the minimum standards for environmental inspections in the Member Länder (2001/331/EC), 2003* p. 29ff.
[130] Administrative regulation regarding the regular monitoring of installations subject to a permit pursuant to the Federal Immission Control Act- Mecklenburg-Pomerania of 2 October 2009 (MV Law Gazette 2009, p. 842) – *Richtlinie zur Regelüberwachung der genehmigungsbedürftigen Anlagen nach dem Bundes-Immissionsschutzgesetz*.
[131] Administrative regulations to § 52 of the Federal Immission Control Act (inspections) of North-Rhine Westphalia of 1 September 2000 (MBl. NRW 2000 p. 1180), paragraph 4.1 – *Verwaltungsvorschriften zum Bundes-Immissionsschutzgesetz – Nordrhein Westphalen*
[132] See above, paragraphs 24.1.1 - 24.1.3.

Figures of 2002 on the financial and human resources available for general environmental inspections in the 16 Länder can be found in the Report of the Federal Republic of Germany on national environmental inspections.[133]

Some of the Länder provide for inspection plans. For instance the inspection plan of Schleswig-Holstein of 2002[134] and the administrative regulation of Mecklenburg Pomerania of 2009[135] include the requirement to establish inspection plans. In addition, the Ministry for Climate Protection, the Environment, Agriculture and Consumer Protection of North-Rhine Westphalia adopted an administrative regulation ('*Erlass*') on the criteria for the risk-based planning of cross-media environmental inspections, that requires the competent surveillance authorities to establish inspection and which was disseminated to the competent authorities on 3 January 2011.

A desk-research did not identify requirements of the Länder to provide trainings for inspectors in the legislation or administrative regulations of the Länder. As reported by representatives of the district government of Cologne, North-Rhine Westphalia provides its employees with the option to use a wide range of trainings ('*Fortbildungen*'). These trainings also address subjects relevant for inspectors. A representative of the Länder Agency for Agriculture, the Environment and Rural Areas of Schleswig-Holstein pointed out that, if necessary, it carries out internal or authorises external trainings.[136]

Note that the inspections carried out by the competent authorities of the Länder are complemented by self-inspection requirements of the operators and by inspections carried out by private audit companies.[137] Examples for self-inspection requirements under the Federal Immission Control Act are the obligation of the operator to measure emissions and to submit emission declarations to the competent authority as well as to appoint immission control advisers and hazardous-incident officers that advise the operator on these issues. An example for the involvement of private audit companies is the entitlement of the competent authority under the Federal Immission Control Act to require the operator of an IPPC installation to have the level of emissions resulting from its operations controlled by a private audit company (§ 26 of the Federal Immission control Act).

2.3 Appeal against the administrative decision

Appeals against administrative measure and appeals against administrative (quasi) criminal penalties must be distinguished. In each case the Federal Basic Law (GG) guarantees the right of every person that has been violated by an administrative body to have recourse to the courts (Article 19(4) sentence 1 GG).

2.3.1 Appeal against administrative measures

Operators of IPPC installations are entitled to appeal against administrative measures, e.g. the closure of an IPPC installation in preliminary proceedings before a local or regional administrative authority, usually the next higher authority (*'Widerspruchsbehörde'*).[138] However, many Länder have partly, temporarily or indefinitely abolished the institution of preliminary proceedings in an attempt to reduce bureaucracy and administrative costs, e.g. Bavaria, Mecklenburg-Western Pomerania, Lower Saxony, North-Rhine Westphalia and Saxon-Anhalt. In these cases the operator must directly challenge the

[133] Federal Republic of Germany, *Report on the recommendations of the European Parliament and the Council from 4 April 2001 to identify the minimum standards for environmental inspections in the Member Länder (2001/331/EC), 2003, p. 3.*
[134] Not attached to this report.
[135] Administrative regulation regarding the regular monitoring of installations subject to a permit pursuant to the Federal Immission Control Act- Mecklenburg-Pomerania of 2 October 2009 (MV Law Gazette 2009, p. 842), paragraph 5 – *Richtlinie zur Regelüberwachung der genehmigungsbedürftigen Anlagen nach dem Bundes-Immissionsschutzgesetz.*.
[136] Information received on the basis of questionnaires and interviews.
[137] Federal Republic of Germany, *Report on the recommendations of the European Parliament and the Council from 4 April 2001 to identify the minimum standards for environmental inspections in the Member Länder (2001/331/EC),* 2003 p. 25.
[138] See Section 68 and Section 73 of the Code of Administrative Court Procedure.

decision before the local administrative court of first instance. The time limit for filing an appeal against the administrative measure before the next higher authority or the administrative court of first instance is one month after the measure was announced to the operator if the operator has been informed in writing of the possibility to appeal; if not, the time limit for filing an appeal is one year. The decision of the next higher authority can be challenged before the local administrative court of first instance. The operator is entitled to appeal against the judgement of the administrative court of first instance on points of facts and law (*'Berufungsverfahren'*) before the regional administrative court of second instance (the higher administrative courts), where the operator is allowed to present new facts and to challenge the application of the law as carried out by the judge of first instance. The judgement of the court of second instance can be challenged before the Federal Administrative Court on points of law only, i.e. the operator is not entitled to present new facts. In both cases appeals are only admissible if the court grants the appeal. Disputes concerning the construction and operation of certain IPPC installations, e.g. power stations utilising furnaces for solid, liquid or gaseous fuels with a furnace heat output of more than 300 megawatts, are litigated, in first instance, before the (regional) higher administrative courts. In this case appeals on points of law can be brought before the Federal Administrative Court.

The operator has standing to challenge administrative measures before the administrative authorities and the courts. If a permit violates property rights or health of people living close to the installation (neighbours), these neighbours are entitled to challenge the permit. Under very restricted conditions neighbours are also entitled to legally force the competent authority to take administrative action against the operator[139] or to carry out inspections[140] if these measures are necessary to avert risks to their health or property from emissions or other pollutions.

Non-governmental organisations are entitled to challenge a permit under specific conditions as laid down in the Law on supplementary provisions governing actions in environmental matters under Directive 2003/35/EC (UmwRG). According to this law recognised non-governmental organisations must, inter alia, assert that the permit 'contravenes legislative provisions which seek to protect the environment, which confer individual rights and which may be relevant to the decision' (§ 2 point 1 of the UmwRG) to have standing before the court. The European Court of Justice decided on 12 May 2011 that this requirement infringes Directive 2003/35/EC and that, as a minimum, non-governmental organisations must have standing in national court procedures to enforce all national provisions based on European environmental legislation. The court also decided that, as long as national legislators have not amended the relevant provision, non-governmental organisations can directly refer to Directive 2003/35/EC to ensure their standing.[141]

2.3.2 Appeal against administrative (quasi) criminal penalties

The appeal procedure is different if the operator challenges a fine that the competent authority has imposed upon him under the criminal administrative law. The addressee of the fine is entitled to lodge an objection against this administrative decision within two weeks after the fine has been announced to the addressee (§ 67 OWiG). In preliminary proceedings the competent authority scrutinises whether this objection is admissible and reassesses its decision. If the competent authority adheres to its assessment that the imposition of a fine is justified, it transfers the case to the competent regional public prosecution office that, based on its own assessment of the case, either terminates the proceedings or, by indicting the alleged perpetrator, initiates the court procedure. The objection is litigated before the criminal court of first instance, the local court (§ 68 OWiG), where the operator is entitled to present new facts. The general rules for this procedure are stipulated in the Administrative

[139] Giesberts/Reinhardt, *Environmental Law (online legal commentary*), § 17 BImSchG, paragraphs 90pp. and § 20 paragraph 46.
[140] Controversially discussed, in favour of this opinion: Giesberts/Reinhardt, *Environmental Law (online legal commentary)*, § 52 BImSchG, paragraphs 33pp.
[141] Judgement of the European Court of Justice of 12 May 2011, in case C-115/09, Friends of the Earth Germany (BUND) vs. district government Arnsberg.

Offences Act and the Code of Criminal Procedure. This procedure deviates in some points from the criminal procedure because it takes certain specifics of the administrative (quasi) criminal law into account, e.g. the competent authority that imposed the fine has standing to give its assessment of the situation in the legal hearing (§ 76 OWiG). Under certain conditions the alleged perpetrator is entitled to appeal against the judgement of the court of first instance by means of filing a legal complaint before the higher regional courts (§ 79 OWiG) where the judgment of the previous instance is only scrutinised in relation to the correct application of law. The reference to new facts is not admissible.

3. Judicial procedure (if relevant-with a focus on criminal sanctions)

3.1 General information

The main principles of the judicial procedure are stipulated in the German Basic Law (GG): Extraordinary courts are prohibited and the alleged perpetrator has the right to an independent judge (Article 101 GG); alleged perpetrators have the right to be heard before the court; offences are only punishable on the basis of laws that were in force before the commission of the offence (nulla poena sine lege); and criminal behaviour is only punishable once (ne bis in idem) (Article 103 GG). These and other principles of the Basic Law are substantiated and complemented in the Code of Criminal Procedure (StPO) that constitutes the procedural rules for the prosecution of criminal offences.

In accordance with these rules only the competent regional public prosecution office has the authority to indict an alleged perpetrator (Article 152(1) StPO) and thereby to initiate court proceedings (Article 151 StPO). This office is obliged to open investigations if there are sufficient factual indications that a criminal offence has been committed (Article 152(2) StPO). In its investigations, the regional public prosecution office is supported by the police force (Article 161 StPO). In first instance the Court Constitution Act predominantly assigns environmental criminal law cases to the jurisdiction of the local courts (§§ 24 and 74 of the Court Constitution Act – GVG). After the indictment, the judge of first instance presides over the oral hearing, where representatives of the regional public prosecution office, the alleged perpetrator, his/her lawyer and the judge participate. At the end of the oral hearing, taking into account information gathered through the hearing and the collected evidence, the judge decides the case independently. NGOs or other individuals are not entitled to join the criminal procedure as accessory prosecutors. The catalogue of criminal offences, in the context of which individuals are allowed to join the procedure as accessory prosecutors, does not include environmental criminal offences. This may be justified by the fact that these offences do not protect individuals.[142]

3.2 Possibilities of appeal

The operator of an IPPC installation can challenge the judgement of the court of first instance (the local courts) before the court of second instance (the regional courts). This appeal on facts and law ('*Berufungsverfahren*') enables the alleged perpetrator to present new facts and to challenge the application of the law as carried out by the judge of first instance (Section 312pp. StPO). The operator may challenge the judgement of the court of the second instance before the Federal Court of Justice ('*Revisionsverfahren*'), however, before this court the operator is restricted to objections against the application of the law as carried out by the judge of the court of second instance (Section 333pp StPO).

4. Synergies between administrative and criminal procedures

[142] Fischer, *Legal Commentary on the Criminal Code*, Prior to § 324, paragraph 3a.

The prosecution of administrative (quasi) criminal offences and the prosecution of criminal offences are intertwined. The same behaviour of the perpetrator can only be punished once and accordingly either as a criminal offence or a criminal administrative offence.[143] If the behaviour of the perpetrator meets the conditions of a criminal offence and an administrative (quasi) criminal offence simultaneously the regional public prosecution office must prosecute the criminal offence and the competent authority must stop the prosecution of the administrative (quasi) criminal offence (§ 21(1) OWiG). This is, for example, the case when the operator of an installation for the production of basic organic chemicals runs the installations without a permit.

There is a further connection between criminal and administrative (quasi) criminal offences due to the fact that the national environmental criminal law is based on the principle of administrative accessoriness. Following this principle the conditions of an environmental criminal offence are only met, if the perpetrator infringes an administrative regulatory provision and, if provided for by the environmental criminal law, meets the additional conditions of the criminal offence, e.g. significantly pollutes the soil (§ 324a StGB).

It is noteworthy that North-Rhine Westphalia has adopted an administrative regulation ('*Erlass*') that regulates the cooperation between environment protection authorities and regional public prosecution offices.[144] This administrative regulation requires that periodic meetings are held between representatives of the competent public prosecution offices, the competent police forces and the authorities responsible for environmental protection; that these authorities inform the competent regional public prosecution offices of any suspicion of an environmental criminal offence; and that, vice-versa, these offices enable the competent authorities to participate in the prosecution of such offences.

5. Conclusions

Proportionality, effectiveness and dissuasive character of the penalties

The administrative (quasi) criminal penalties and the criminal penalties in relation to IPPC installation are assessed as proportionate, effective and dissuasive.

The penalties are assessed as proportionate. Fines between Euros 5 and 50,000 and the possibility to confiscate the economic benefit are assessed as proportionate means to address administrative (quasi) criminal offence. The available range of fines leaves room to punish an infringement on the basis of the severity of the individual violation. The possibility to siphon off the profit is assessed as balanced taking into account that the perpetrator would not have gained this benefit, if he had complied with the law.

Furthermore, it is assessed as proportionate that the violation of the permit obligation or the essential permit requirements leads to criminal penalties of a maximum of three years of imprisonment and/or a fine considering the major risks that may result from these unlawful operations.

The penalties are assessed as effective, because the administrative (quasi) criminal penalties cover all national obligations transposing the IPPC Directive and the criminal penalties cover the major obligations of this Directive. Furthermore, the procedural rules in relation to the prosecution of

[143] In favour of this: Jarass/Pieroth, *Legal Commentary to the Basic Law of the Federal Republic of Germany*, Article 103, paragraph 74.
[144] This administrative regulation is available at: https://recht.nrw.de/lmi/owa/br_bes_text?anw_nr=1&gld_nr=3&ugl_nr=3214&bes_id=2601&val=2601&ver=7&sg=&aufgehoben=N&menu=1

criminal and administrative (quasi) criminal offences are assessed as effective to implement these penalties.

The penalties are assessed as dissuasive, because administrative (quasi) criminal and criminal penalties combined are sufficiently stringent to deter potential perpetrators. Especially, the option to confiscate the economic benefit provides for deterrence.

Representatives of the district government of Cologne responsible for the surveillance of IPPC installations assessed the available sanctions under the legislation as proportionate.

They pointed out that North-Rhine Westphalia provides for an indicative catalogue of fines for infringements against environment related provisions (*'Bußgeldkatalog Umwelt'*)[145] that supports the competent surveillance authorities in finding proportionate sanctions. This catalogue specifies the scale of fines as provided for by the legislation. For instance, in accordance with the Federal Immission Control Act, the construction of an IPPC installation without permission is subject to a fine of up to Euros 50,000. The catalogue specifies this scale in relation to installations worth less than Euros 50,000. In North-Rhine Westphalia these installations are subject to fines between Euros 510 and 2,600.

They also assessed the practical implementation as effective and dissuasive.

They believe that it is important to enforce the administrative sanctions to ensure effectiveness and deterrence. Nevertheless, in their experience, it was often sufficient to inform the responsible operators of possible fines to make them stop the infringement.

They also assessed the penalties applied as deterrent. This was concluded from the fact that after operators had been fined, they did not repeat the infringements. To make operators comply with permit requirements and legislation after an infringement, they considered it as an effective approach to precisely inform the operator and his employees of the infringement and the necessary means to eliminate it.

However, they identified a lack of human resources to carry out inspections, so that not all IPPC installations are subject to a regular control.[146] This was considered as ineffective in relation to the procedure to identify infringements. It was added, that North-Rhine Westphalia plans to recruit 300 employees in the field of the environment during the next years, to address the problem of understaffing.

[145] The fine catalogue environment of North-Rhine Westphalia of 2006 was established by the Ministry for the Environment, Nature Conservation, Agriculture and Consumer Protection of North-Rhine Westphalia and is available at: http://www.kreisjaegerschaft-coesfeld.de/red/ges-bussgeldkatalog-umwelt-nrw-2010-02-27.pdf

[146] See also: Ministry for Labour, Integration and Social Affairs of the Land North-Rhine Westphalia and Ministry for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection of North-Rhine Westphalia, the case ENVIO/ PCB in Dortmund, Overall assessment of the ministries, 7 April 2011, p. 12., http://www.umwelt.nrw.de/ministerium/pdf/envio_gesamtbewertung.pdf

Case studies

Introduction

Case studies one and two are good examples to depict that the imposition of very high fines as well as of very low fines can be proportionate, effective and dissuasive. In the first case the competent authority sanctioned a company running an installation with a fine of Euros 155,000 because it had made a huge profit by not complying with legal requirements. Therefore the competent authority assessed it as proportionate and dissuasive to calculate the fine on the basis of this profit. In the second case the competent authority sanctioned the project manager that had notified a non-essential change to an installation late with a fine of only Euros 200. The competent authority also considered this fine as proportionate and dissuasive taking into account that the change had served safety purposes; that the project manager had admitted the perpetration; and that the operator of the installation had taken measures to prevent further infringements. In both cases the fine was accepted without appeal and the perpetrators did not repeat the infringements.

Case study 3 illustrates the interplay between administrative measures, in this case the closure of an installation, and criminal penalties, when the operator infringes major obligations related to IPPC installations.

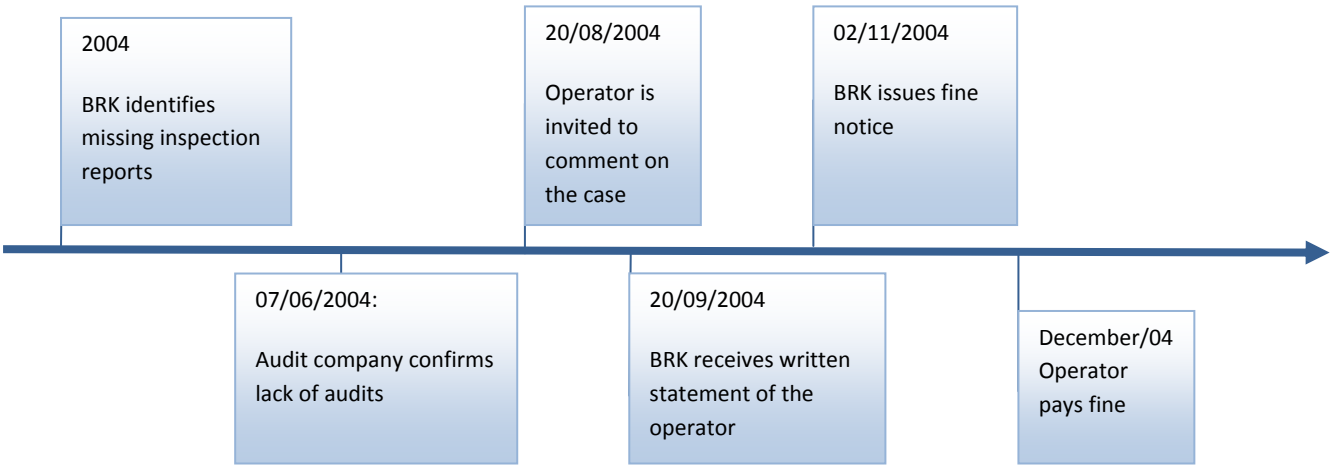
Case study 1: Administrative (quasi) criminal fine of Euros 155,000

Interviewee with and completion of a questionnaire by – Dr Horst Büther
Organisation and position:

1. District government of Cologne (department 53, immission protection), head of department
2. Member of the board of IMPEL (European Union Network for the Implementation and Enforcement of Environmental Law).

Telephone number: + 49 221 147 2252
Date of interview: 5 May 2011

Timeline of the procedure



BRK: district government of Cologne, North Rhine-Westphalia

Description of the background

This case deals with a fine imposed on the operator of eight storage tanks for petroleum products (ancillary plants) connected to an oil refinery. Under North-Rhine Westphalia's Ordinance on Installations for Handling of Substances Hazardous to Water (VAwS),[147] the operator is obliged to commission a private audit company to carry out regular inspections of these tanks. These companies have to report the results in form of inspection reports to the district government of Cologne (BRK) as competent authority.

When controlling these inspection reports, the BRK came to the conclusion that, between the years 2000 and 2004, the operator of the storage tanks for petroleum products had not complied with the requirement under the VAwS to have these tanks inspected by an audit company. On request, the audit company normally commissioned by the operator confirmed this conclusion on 7 June 2004.

Legislation applicable

Under North-Rhine Westphalia's Ordinance on Installations for Handling of Substances Hazardous to Water in conjunction with North-Rhine Westphalia's Water Act the competent surveillance authorities are entitled to impose fines of up to Euros 50,000 (§ 16 no.7 of the VAwS in conjunction with § 61 paragraph 1 no.4 of North-Rhine Westphalia's Water Act). According to § 17(4) of the Administrative Criminal Offences Act the fine should be higher than the economic benefit that the perpetrator has drawn from the perpetration of the administrative (quasi) criminal offence. Hence, a fine may be much higher than Euros 50,000.

The competent authority must hear the alleged offender before imposing the fine (§ 55 of the Administrative Criminal Offences Act (OWiG)). In simple cases, the competent authority complies with this obligation by enabling the alleged perpetrator to comment on the allegations in written form within a time limit of two weeks. The competent authority may prolong this time limit on request.

The alleged perpetrator has two weeks to appeal against the fine after he has received the fine notice. If he does not appeal against the fine, he must pay the fine four weeks after the receipt of this notice (§ 66 OWiG).

The procedure

The district government of Cologne provided the operator of the installation with the possibility to comment in writing on the allegations on 20 August 2004 setting a time limit of two weeks and received comments of the operator on 20 September 2011 after it had prolonged the time limit for submitting the comments once.

On the basis of its investigations and the written comments of the operator, the BRK decided to fine the company. In accordance with § 17 paragraph 4 of the Administrative Criminal Offences Act, it calculated a fine of Euros 155,000 taking into account the profit that the company had made by not carrying out the periodic inspections. The fine notice was issued on 2 November 2004.

The BRK did not consider taking administrative measures in order to eliminate the infringement, since the infringement had taken place in the past and did not perpetuate. In addition, the offence was not punishable under the environmental criminal law. As a consequence, the BRK did not transfer the case to the competent regional public prosecution office.

Assessment

[147] Note that this law does not directly transpose obligations of IPPC installations. However, the control of these obligations is based on the same provisions as the control of IPPC obligations.

The fine of Euros 155,000 is assessed as proportionate, because the operator would have been obliged to spend this money, if he had complied with the requirement to carry out inspections of the storage tanks.

This penalty is assessed as dissuasive, since after the imposition of the fine, the operator complied with all regulatory provisions.

The administrative procedure that led to the fine is also assessed as effective, in particular, because the BRK responded quickly to the offence. It can be derived from the timeline of the procedure that it only took the BRK five months to punish it. After the audit company had confirmed on 7 June 2004 that the operator had not carried out the obligatory inspections of the tanks, the BRK issued the fine notice at the beginning of November.

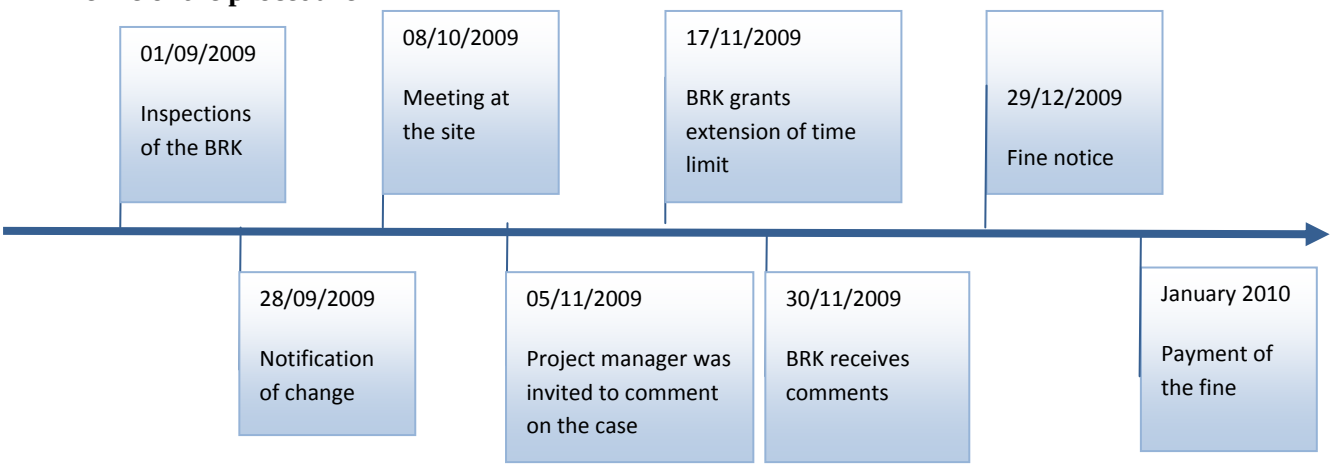
Case study 2: Administrative (quasi) criminal fine of Euros 200

Interview with and completion of a questionnaire by – Dr Horst Büther
Organisation and position:

1. District government of Cologne (department 53, immission protection), head of department
2. Member of the board of IMPEL (European Union Network for the Implementation and Enforcement of Environmental Law)

Telephone number: + 49 221 147 2252
Date of interview: 5 May 2011

Timeline of the procedure



BRK: district government of Cologne, North Rhine-Westphalia

Description of the background

During safety inspections of the district government of Cologne (BRK) in 2009 (1 January 2009), inspectors noticed that a storage tank for petroleum products (ancillary plants) that pertained to an oil refinery[148] was subject to maintenance measures (changes). These measures sought to enhance the safety of this tank. When, at a later point in time (28 September 2009), the operator notified a non-essential change to the installation to the BRK, the authority decided to investigate the circumstances of this change in more detail. For this, it scheduled a meeting at the installation (8 October 2009). During this meeting, the suspicion was confirmed, that the change measures had directly followed the

[148] Case 1 and case 2 deal with different oil refineries.

maintenance measures and that these change measures had already started before they were notified to the BRK.

Legislation applicable

Under the Federal Immission Control Act the late notification of non-essential changes to an installation subject to authorisation (including IPPC installations) can be sanctioned with fines of up to Euros 10,000 (§ 62(2) no.1 and § 15 of the Federal Immissions Control Act in conjunction with § 17 (1) and (2) of the Administrative Criminal Offences Act).

The competent authority must hear the alleged offender before imposing a fine (§ 55 of the Administrative Criminal Offences Act (OWiG)). In simple cases, the competent authority complies with this obligation by enabling the alleged perpetrator to comment on the allegations in written form within a time limit of two weeks. The competent authority may prolong this time limit on request.

The alleged perpetrator has two weeks to appeal against the fine after he has received the fine notice. If he does not appeal against the fine, he must pay the fine four weeks after the receipt of this notice (§ 66 OWiG).

The procedure

The BRK enabled the project manager to comment in writing on the allegations on 5 November 2009 setting a time limit of two weeks. After it had granted an extension of the time limit on 17 November 2009, it received a written statement of the perpetrator, in which he admitted the infringement, on 30 November 2009. On the basis of its own conclusions and the written comments of the project manager, the district government of Cologne sanctioned the responsible project manager with a fine of Euros 200. The fine notice was issued on 29 December 2009.

The BRK justified this low fine on the following grounds. The project manager had admitted to having committed the offence; the operator of the installation had recalled to the project manager, who had failed to notify the change to the installation timely, and to all other project managers working in the installation, the obligation to notify non-essential changes in time; and the non-notified change measure had served to enhance the safety of the installation.

The BRK had immediately ruled out administrative measures to eliminate the infringement, since the infringement had taken place in the past and did not perpetuate. In addition, the offence was not punishable under environmental criminal law. As a consequence, the BRK did not transfer the case to the competent regional public prosecution office.

The project manager paid the fine within the legal time limit (before the end of January 2010). From this time onwards, all notifications were carried out in time by all responsible project managers working at this installation.

Assessment

The fine of Euros 200 is assessed as proportionate and dissuasive. It is assessed as proportionate because the BRK took due account of the following mitigating circumstances. The responsible project manager had admitted the offence; the operator of the installation cooperated with the BRK by taking measures to avoid further infringements; and the change measures had served to improve the safety of the installation. Hence, there was no need to impose a more severe penalty. The fine is assessed as dissuasive since, after the BRK had imposed the fine, all project managers working at the installation notified non-essential changes timely and did not otherwise infringe regulatory obligations.

The administrative procedure that led to the fine is also assessed as effective, in particular, because the BRK responded quickly to the offence. It can be derived from the timeline of the procedure that it took the BRK only four month to punish it. The procedure started in September 2009 and the BRK issued the fine the end of December 2009.

Case study 3: Closure of the installation and initiation of criminal procedure

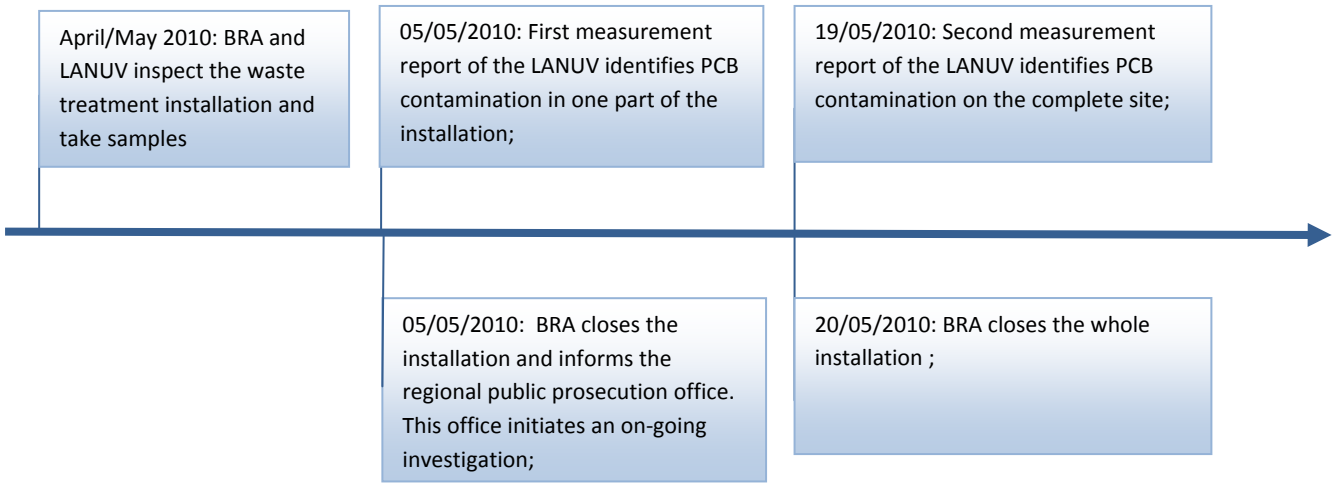
Main sources of information:

Ministry for Labour, Integration and Social Affairs of the Land North-Rhine Westphalia and Ministry for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection of North-Rhine Westphalia, *the case ENVIO/ PCB in Dortmund, overall assessment of the ministries*, 7 April 2011, p. 12, available at:
http://www.umwelt.nrw.de/ministerium/pdf/envio_gesamtbewertung.pdf

Prognos AG, *final report on the case ENVIO/ Dortmund's harbour – Clarification of further questions in the context of immission protection and waste management*, 28 March 2011, p. 17ff., available at:
http://www.umwelt.nrw.de/ministerium/pdf/envio_abschlussbericht.pdf

Complementary questions answered by: – Mr Andreas Jungmann
Organisation and position: District government Arnsberg (*Dezernent*)
Telephone number: + 49 2931 822 606
Date of the receipt of the e-mail: 18 May 2011

Timeline of the procedure



LANUV: Agency for Nature Conservation, Environment and Consumer Protection of North Rhine-Westphalia
BRA: district government of Arnsberg, North Rhine-Westphalia

Description of the background

In 1985, the (then) competent authority responsible granted an authorisation for a waste treatment installation to a predecessor company of the ENVIO Recycling GmbH & Co. KG (ENVIO), the latter of which is the main party in this case.

ENVIO took over the waste management plant in 2004 and notified the competent authority for the first time in October 2004 that it processed transformers from an underground landfill containing PCBs (polychlorinated biphenyls).[149]

From 2007 on, the Agency for Nature Conservation, Environment and Consumer Protection of North Rhine-Westphalia (LANUV) reported significantly higher levels of PCBs in green cabbage in the surroundings of Dortmund. As a consequence, the competent surveillance authority, the district government of Arnsberg in North-Rhine Westphalia (BRA), initiated measures to identify the polluter. Inter alia, it inspected various installations in Dortmund's harbour including ENVIO's waste treatment installation, however, without finding the source.

In September 2008 the BRA received an anonymous complaint. The complainant informed BRA that, ENVIO had been carrying out unlawful activities as regards the processing of PCB-contaminated materials for several years The BRA promptly investigated these allegations, but did not identify any evidence to prove them.

Legislation applicable

In accordance with § 20 paragraph 2 sentence 1 of the Federal Immission Control Act the competent authority is obliged to close an installation if the operator carries out an unauthorised essential change to the installation.

Pursuant to the national environmental criminal law the local criminal court may punish an unauthorised essential change to an installation with a maximum imprisonment of three years or a maximum fine of 360 daily units, in case of intentional perpetration, and, in case of negligent perpetration, with imprisonment of a maximum of two years or a maximum fine of 360 daily units (§ 327(2) no.1 and (3) no.2 of the Federal Criminal Code).

The local or regional[150] criminal courts may punish unauthorised essential changes that are carried out deliberately and cause serious and permanent pollution of the environment with imprisonment between six months and ten years (§ 330 (1) of the German Criminal Code). If this change places a large number of people in danger of injury, the criminal court can impose imprisonment of between one and ten years.

The unauthorised essential change of an installation also constitutes an administrative (quasi) criminal offence that is punishable by the competent authority with a fine of up to Euros 50,000 (§ 62(1) no.4 and (3) and § 16 of the Federal Immission Control Act). However, in accordance with § 41 of the Federal Administrative Criminal Offences Act the competent surveillance authority must transfer the case to the competent regional public prosecution office and stop its own investigations, if it identifies indications that a criminal offence was committed. This office then involves the competent authority in its investigations. An administrative regulation (Erlass) of North-Rhine Westphalia in detail

[149] Note that the waste management plant does not fall under the scope of the current IPPC Directive. However, it will fall under the broader scope of the Industrial Emissions Directive.

[150] If the regional public prosecution office expects the court to sentence the perpetrator with more than 4 years of imprisonment, it indicts the alleged perpetrator before the competent regional court.

regulates the cooperation between authorities and regional public prosecution offices before and after these investigations.[151]

The procedure

In April/May 2010, in a renewed attempt to identify the polluter of PCBs that had been identified in the surroundings of Dortmund, inspectors of the LANUV and the BRA inspected ENVIO's installation and took samples on-site.

On 5 May 2010 the LANUV released its first measurement report, based on samples taken during this inspection that revealed high concentrations of PCB on metalwork in one part of the installation.

Under these conditions the BRA assessed the handling of the transformers and the inherent emission of PCBs as an unauthorised essential change to the installation and thus closed the affected part of the installation on the same day.

Also on 5 May 2010 the BRA informed the regional public prosecution office of the suspicion that ENVIO had committed an environmental crime. Its investigations are still on-going.

The second measurement report of the LANUV dating from 19 May 2010 revealed that the complete installation site was contaminated. As a consequence, the BRA ordered the immediate and complete closure of the installation.[152]

Assessment

Taking into account that § 20 paragraph 2 sentence 1 of the Federal Immission Control Act requires the competent authority to close an installation that has been subject to an unauthorised essential change, the BRA did not have any discretionary power whether or not to close the installation. The legal obligation to close the installation in these cases is assessed as proportionate and dissuasive considering the severity of this offence. In addition, after having learned of the contamination, the BRA closed the installation on the same day. This is assessed as an effective response to the offence.

It should be noted that under the national legislation the closure of an installation is not assessed as a penalty but as an administrative measure to enforce compliance with the national legislation. Hence, from a formal standpoint, these national measures are not subject to the requirement of being proportionate, effective and dissuasive as laid down for example by Directive 2010/75/EU on industrial emissions.

In addition, in accordance with the Administrative Criminal Offences Act, the BRA had to transfer the case to the regional public prosecution office.

If the regional public prosecution office indicts responsible managers and employees and the criminal court comes to the conclusion that the operation of the installation caused a serious damage to the environment or that it placed a large number of people in the danger of injury it is entitled to impose sentences of up to 10 years imprisonment.

Since the case is still pending, an assessment of the proportionality, effectiveness and dissuasiveness of the potential criminal penalties is not yet possible.

[151] This administrative regulation is available at: https://recht.nrw.de/lmi/owa/br_bes_text?anw_nr=1&gld_nr=3&ugl_nr=3214&bes_id=2601&val=2601&ver=7&sg=&aufgehoben=N&menu=1

[152] The summary of the events is based on the final report of the Prognos AG, *the case ENVIO/ Dortmund's harbour – Clarification of further questions in the context of immission protection and waste management*, 28 March 2011, p. 17ff., available at: http://www.umwelt.nrw.de/ministerium/pdf/envio_abschlussbericht.pdf

It is noteworthy, that the Ministry for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection of North-Rhine Westphalia (MKULNV) questioned whether a more effective and better coordinated control of the installation, before the infringements were discovered, could have prevented or mitigated the contamination. Therefore, they carried out an examination of whether the competent surveillance authorities worked and cooperated effectively together to control the installation. As part of this examination they commissioned the Prognos AG to prepare reports analysing the structure and organisation of the authorities and immissions protection and waste management related questions. These reports, inter alia, criticised the lack of a central body to coordinate the control as well as the provision of insufficient human resources at the time when the relevant events took place.[153]

[153] See Ministry for Labour, Integration and Social Affairs of the Land North-Rhine Westphalia and Ministry for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection of North-Rhine Westphalia, *the case ENVIO/ PCB in Dortmund, Overall assessment of the ministries*, 7 April 2011, p. 12., http://www.umwelt.nrw.de/ministerium/pdf/envio_gesamtbewertung.pdf

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Annex IV- Hungary

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in Hungary

Executive Summary

In case of breaching the requirements laid down in the transposing legislation of the IPPC Directive (Government Decree No. 314/2005 (XII. 25.)) on Environmental Impact Studies and Integrated Environment Use Permits ('IPPC Decree'), administrative procedures can be conducted against IPPC installations. In addition to the administrative liability, IPPC installations may be subject to criminal or administrative (quasi) criminal liability. [154] However, in Hungary, criminal and administrative (quasi) criminal environmental offences are broad and cover general offences. In other words, the Criminal Code[155] and the Act on Petty Offences[156] (also called as administrative (quasi) criminal offences) do not contain specific sanctions for the infringement of the transposing provisions of the IPPC Directive. This suggests that in these cases the general rules of criminal and administrative (quasi) criminal procedures are applicable.

Administrative procedures can be conducted alongside with criminal or administrative (quasi) criminal procedures. [157] However, administrative (quasi)criminal and criminal procedures cannot be conducted at the same time. [158]
In practice, most of the environmental penalties with regard to industrial installations are administrative in nature. Criminal procedures conducted against IPPC installations are rare.

The central administrative authorities responsible for environmental protection are the Ministry of Rural Development and the National Inspectorate for Environment, Nature and Water. The Ministry is responsible for supervising the activities of the National Inspectorate and the regional inspectorates. The day-to-day matters and regulatory issues are dealt by the regional inspectorates at first instances and by the National Inspectorates at second instance.

On the basis of the interviews conducted and in accordance with the current legislative framework, administrative/ administrative (quasi)criminal/criminal sanctions in Hungary are deemed to be proportionate, effective and dissuasive. As an example to the interpretation of the principle of proportionality, the amount of administrative fines imposed on IPPC installations needs to be adjusted to the severity of the environmental damage caused, the environmental pollution and the periodicity of the illegal conduct.

With regard to the principle of effectiveness, most of the interviewees emphasised that a sanction is effective if *e.g.* it contributes to achieve the aim of the legal act and/or forces the operator to fulfil his/her legal obligations.

A sanction is considered as dissuasive, if it prevents the defendant and/or other operators from any illegal activity in the future.

The table below indicates the provisions of the IPPC Directive covered by a sanction in Hungary. Criminal and administrative (quasi) criminal sanctions are not listed in the table as there are no specific sanctions in the Criminal Code, or in the Petty Offences Act, which would punish the

[154] Note that civil procedures are not subject to the study.
[155] Act IV of 1978- Criminal Code.
[156] Act LXIX of 1999 on Petty Offences.
[157] Environmental Protection Act, Article 107, 'the imposition of an environmental fine does not free anyone from criminal, administrative (quasi)criminal or civil liability, or from being obliged to limit, suspend or halt an activity, from realizing protective measures or from restoring the natural or previous state of environment'.
[158] Petty Offences Act, Article 1(2) '[…] no petty offence can be established if the action constitutes a crime'.

infringement of the transposing provisions of the IPPC Directive (see sections 3.1. and 3.3. for more details).

Table 1: Enforceable provisions covered by penalties in Hungary

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	-		
4	Government Decree 314/2005, Article 1(2) and (5); Article 2(3))		
5	Government Decree 314/2005, (Article 27(3))		
6	Government Decree 314/2005, (Annex VIII)		
12 (1)	-		
12 (2)	-		
14 (a)	Government Decree 314/2005, (Article 22(2))		
14 (b)	Government Decree 314/2005, (Article 23; Annex XI, point 4.a.)		
14 (c)	-		

1. Applicable sanctions

The Hungarian Constitution[159] recognises and implements everyone's right to a healthy environment. In line with the Constitution,[160] Article 101(1) of the Environmental Protection Act[161] sets that 'whoever endangers, pollutes or harms the environment with his activity or omission, or performs his activity breaching environmental requirements shall bear the criminal, civil,[162] administrative or administrative (quasi)criminal responsibility defined by this Act or by other laws.' Those who breach this general prohibition shall *inter alia* cease their misconduct, mitigate and remedy the damage caused and restore the environment either to its prior state or to the state prescribed by law. The polluter may also be held liable pursuant to Article 101(2) of the Environment Act for the cost of prevention. Moreover he/she is obliged to inform the authorities of the polluting activity and refrain from engaging in activities posing an imminent threat or causing damage to the environment.

Most of the environmental penalties with respect to industrial installations are administrative in nature. The classification of administrative offences and sanctions related to environment are set in the Environmental Protection Act and other sector specific legislation, such as in the IPPC Decree. In line with Article 106 of the Environmental Protection Act, administrative liability applies when the competent authority have not authorised the activity of an installation or the activity is performed in a way that breaches environmental legislation or the decision of the competent authority. If the operator fails to comply with environmental requirements, the competent authorities can impose administrative sanctions, including a fine/or requiring the operator to perform or abstain from certain activity. The level of fines often varies according to the level, weight and recurrence of the environmental pollution and environmental damage caused.[163] Administrative sanctions can be imposed both on legal and natural persons. The Environmental Protection Act operates with a strict liability system making the entities causing environmental damages responsible irrespective of negligence or fault.

The IPPC Directive is transposed by Government Decree 314/2005 (XII. 25.) on Environmental Impact Assessment and Integrated Environment Use Permits ('IPPC Decree'), which sets *inter alia* offences provisions and their related administrative sanctions.

According to the transposing legislation, the imposed administrative sanctions can lead to a fine (up to Euros 1,826 or Euros 365 per day)[164] and the limitation, suspension or prohibition[165] of the continuation of the illegal conduct.[166] The competent authorities may also oblige the operators to comply with the conditions set in the permit, prepare a programme of measures or carry out an environmental review. Moreover, the competent authorities may withdraw the environmental or integrated environmental permit of the operator.

Table 2 below indicates the types of administrative and criminal offences and related penalties in

[159] Article 18 of Act XX of 1949 - Constitution of the Republic of Hungary.
[160] It is noted that in January 2012 a new Constitution will enter into force.
[161] Act LIII of 1995 - Environmental Protection Act.
[162] Civil liability is not subject to the current legal study.
[163] Act No LIII of 1995 - Article 106(1).
[164] Rules applied for imposing fines: (1) In accordance with Article 26(3) and Article 26(1) of the IPPC Decree, when an installations is operating without an integrated environmental permit or without an environmental permit, the competent authority, having regard to the danger of illegal conduct to the environment may impose a fine of Euros 182 to 365 per day for the period the installation was operating without a permit. (2) In accordance with Article 26(4) when an installation fails to comply with the permit conditions while carrying out activities, or do not comply with the administrative decisions the competent authorities may *inter alia* oblige the operator to pay a fine of Euros 730- 1,826.
[165] The main difference between prohibition and suspension is that while suspension is temporary in nature, prohibition is something definitive
[166] IPPC Decree Article 26(1): in case of operating without integrated environmental permit, or without an environmental permit (Article 26(1) and (2)); endangering the environment or causing environmental pollution or non-compliance with administrative decision (Article 26(5)); non-compliance with administrative decisions (Article 26(5)).

Hungary for each of the key enforceable obligations under the IPPC Directive.

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal/administrative (quasi) criminal penalties in Hungary

	Administrative		Criminal/ Administrative (quasi) criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Operating without integrated environmental permit, or without an environmental permit. ***26 § (1) and (2) Government Decree 314/2005 (XII.25)***[167]	Depending on the degree of impact on the environment, the competent authority may, a) limit; b) suspend; or c) prohibit the continuation of the illegal conduct. ***26 § (1) Government Decree 314/2005 (XII.25)*** In addition, the competent authority shall, having regard to the danger of the illegal conduct may have on the environment, impose a fine of Euros 182 to 365/day (HUF 50,000 to 100,000) for the period when the installation was operating without a permit. ***26 § (3) Government Decree 314/2005 (XII.25)***	**Administrative (quasi)criminal offence:** See description below the table.	**Administrative (quasi)criminal penalty:** See description below the table.
Obligation to supply information for application for permits	N/A	N/A	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	N/A	N/A	N/A	N/A
Obligation to comply with the conditions set in the permit or mandatory ELVs	Infringement or non-compliance with the following requirement: Obligation of the operator to comply with the permit conditions while carrying out activities. ***26 § (4) Government Decree 314/2005 (XII.25)***	The competent authority can oblige the operator to: a.) pay a fine of Euros 730-1,826 (HUF 200,000 to 500,000) b.) require the operator to comply with the conditions set in the permit, c.) within a six months period prepare a programme of measures or carry out an environmental review. ***26 § (4) Government Decree 314/2005***	**Administrative (quasi)criminal offence:** See description below the table. **Criminal offence:** See description below the table.	**Administrative (quasi)criminal penalty**: See description below the table. **Criminal penalties:** See description below the table.

[167] Article 26(2): 'Operating without an integrated environmental permit in case of activities specified in Article 1(3)(a)' Article 1(3) refers to those activities which are listed in Annex I of the Government Decree.

	Endangering the environment or causing environmental pollution or non-compliance with administrative decision. ***26 § (5) Government Decree 314/2005 (XII.25)***	Depending on the degree of influence on the environment, the competent authority may: a) limit; b) suspend; or c) prohibit the continuation of the illegal conduct. ***26 § (1) Government Decree 314/2005 (XII.25)***		
	<u>Infringement or non-compliance with the following requirement:</u> Obligation of the operator to comply with administrative decision. ***26 § (5) Government Decree 314/2005 (XII.25)***	Depending on the degree of influence on the environment, the competent authority may: a) limit; b) suspend; or c) prohibit the continuation of the illegal conduct. ***26 § (1) Government Decree 314/2005 (XII.25)*** 'Or' Withdraw the environmental or integrated environmental permit. ***26 § (5) Government Decree 314/2005 (XII.25)*** The competent authority can require the operator to: a.) pay a fine from Euros 730 - 1,826 (HUF 200,000 to 500,000), b.) comply with the conditions set in the permit, c.) within a six months period prepare a programme of measures or carry out an environmental review. ***26 § (4) Government Decree 314/2005 (XII.25)***		

Illegal activities or omissions can constitute petty offences (also called administrative (quasi)criminal offences). The sanctions imposed for administrative (quasi)criminal offences are similar to those for criminal offences; therefore sanctions could for example include imprisonment or fines.[168] With regard to the IPPC installations, the so-called 'environmental protection petty offence' is the most relevant.[169] According to Article 148 of the Petty Offence Act, a fine up to Euros 547 (HUF 150,000) can be imposed in cases of operating without an environmental permit or non-complying with its conditions. According to the Hungarian legal system, only natural persons can be liable for petty offences. In case a legal person breaches its legal obligations, the person whose act or omission caused the breach will be liable.

For most serious breaches of environmental obligations, criminal liability may arise. Typical sanctions pursuant to Hungarian criminal law can include principle and supplementary punishments, such as imprisonment or a fine.[170] The Hungarian Criminal Code does not cover offences which relate specifically to infringements of the IPPC Directive, but it includes general offences which can be of relevance, such as 'damaging the environment',[171] 'damaging the nature',[172] 'illegal deposition of waste'[173] and 'danger to the public'. [174]

As an example, in case of the offence 'damaging the environment', a person responsible for any pollution of the earth, the air, the water, the biota (flora and fauna) and their constituents, resulting in (i) their endangerment (ii) damage to such an extent that its natural or previous state can only be restored by intervention, or (iii) damage to such an extent that its natural or previous state cannot be restored at all, is guilty of a felony and can be punishable of imprisonment up to 8 years.

The criminal liability of legal persons was introduced in the Hungarian legal system in 2001, by Act CIV of 2001.[175] Three different sanctions can be imposed for crimes committed by legal persons: (1) the dissolution of the legal person, (2) constraining the activity of the legal person and (3) fines.[176]

The way the fines are calculated is as follow: three times the benefits of the legal person from the illegal conduct, but at least HUF 500 thousands (Euros 1,862.85).

2 Administrative procedure

2.1 General elements on the legal tradition and potential evolution

Since the reform of the Hungarian criminal law in 1955, administrative sanctions and offences have

[168] Article 13(1) of Act LXIX of 1999: Penalties applicable for petty offences: a.) imprisonment, b.) fine. Measures applicable for petty offences: a.) prohibition from driving, b)confiscation of goods, d.) notification, e.) expulsion.

[169] List of petty offences which could be relevant with regard to IPPC installations:

- Environmental protection petty offence (Act LXIX of 1999, Article 148);
- Nature protection petty offence (Act LXIX of 1999, Article 147);
- Water pollution petty offence (Government Decree 218/1999 (XII. 28.), Article 126);
- Petty offence of breaching water law requirements (Government Decree 218/1999 (XII. 28.), Article 125); and
- Petty offence of breaching flood protection and/or inland flood protection requirements (Government Decree 218/1999 (XII.28.), Article 127).

[170] Criminal Code Article 38: (1) Principal punishments are: 1. imprisonment, 2. labour in the public interest, 3. Fine 4. Prohibition from profession 5. Prohibition from driving vehicles and 6. Expulsion. Supplementary punishments are: 1. prohibition from public affairs and 2. Banishment.

[171] Act IV of1978, Article 280.

[172] Act IV of 1978, Article 281.

[173] Act IV of 1978, Article 281/A.

[174] Act IV of 1978, Article 259.

[175] Act CIV of 2001 on Criminal Measures Applicable against Legal Persons.

[176] Article 2(1) and Article 3 of Act CIV of 2001.

been separated from criminal law.[177] Administrative sanctions can be imposed by competent administrative authorities within the framework of administrative procedures to address unlawful activities. Administrative sanctions are onerous in nature and can be executed.

On the basis of their functions, administrative sanctions can be grouped as follow:

- Administrative sanctions enforcing administrative provisions: *e.g.* Article 26(4) of Government Decree 314/2005 (XII. 25.) - complying with the conditions set in the permit;
- Preventive administrative sanctions: *e.g.* Article 101(2) of Act LIII of 1995.- being liable for the costs of prevention of the polluting activity;
- Repressive administrative sanctions: *e.g.* Article 26(1) of Government Decree 314/2005 (XII. 25.) - limiting the illegal conduct;
- Compensatory administrative sanctions: *e.g.* Article 26(4) of Government Decree 314/2005 (XII. 25.) - paying a fine of Euros 730- 1,826.

2.2 Inspections

2.2.1 General information

In Hungary, environment related inspections are performed by administrative bodies for environmental protection.[178] The main administrative authorities for environmental protection at country level are the Ministry of Rural Development[179] and the National Inspectorate for Environment, Nature and Water.[180] The National Inspectorate for Environment, Nature and Water and the regional inspectorates are responsible for the day-to-day matters and regulatory issues, whereas the Ministry of Rural Development supervises such activities.[181] At first instance, environment-related matters are mainly managed by the ten Regional Environment, Nature and Water Inspectorates.[182] Most of the control carried out by the inspectorates takes place according to annual plans. In Hungary inspection plans are not generally available to the public.[183]

The ten regional inspectorates are competent for the enforcement of the transposing legislation of the IPPC Directive. In 2010, the estimated number of staff members working on IPPC related inspections was 145. The number of IPPC installations subject to administrative control was about 1119.[184] In 101

[177] Fazekas Marianna – Ficzere Lajos (edit.), 'Hungarian Public Administration Law' (Magyar közigazgatási jog. Általános rész), 2006, Osiris Kiadó, Budapest pp. 540-553.
[178] The International Comparative Legal Guide to Environment Law 2010, 'Gabor Hugai and Andras Komaromi: Hungary', http://www.iclg.co.uk/khadmin/Publications/pdf/3609.pdf
[179] Before Ministry of Environment and Water:
http://www.kormany.hu/hu/videkfejlesztesi-miniszterium
[180] The National Environment, Nature and Water Inspectorate is mainly a second instance authority. http://www.orszagoszoldhatosag.gov.hu/index.php?akt_menu=78&bemut=3
[181] The International Comparative Legal Guide to Environment Law 2007, Ivan Bartal, http://www.iclg.co.uk/khadmin/Publications/pdf/1177.pdf
[182] Észak-dunántúli Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Győr
Nyugat-dunántúli Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Szombathely
Közép-dunántúli Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Székesfehérvár
Dél-dunántúli Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Pécs
Közép-Duna-völgyi Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Budapest
Tiszántúli Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Debrecen
Felső-Tisza-vidéki Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Nyíregyháza
Észak-magyarországi Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Miskolc
Közép-Tisza-vidéki Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Szolnok
Alsó-Tisza-vidéki Környezetvédelmi, Természetvédelmi és Vízügyi Felügyelőség, Szeged
[183] Commission Staff Working Paper, Report on the implementation of Recommendation 2001/331/EC providing minimum criteria for environmental inspections, SEC (2007) 1493.
[184] In 2008 this number was 979. Resource used: http://eea.eionet.europa.eu/Public/irc/eionet-circle/reporting/library?l=/ippc/ippc_permitting&vm=detailed&sb=Title

cases, the administrative authorities required the operators to take actions and in 134 cases imposed administrative fines.[185]

2.2.2 Key elements of the inspection procedures

Regional inspectorates can gather information about the activities of the IPPC installations through regular administrative control. Act CXL of 2004 on the general rules of public authority procedures and services, sets the main rules for administrative control. Environment related inspections are regulated by Act LIII of 1995 on Environmental Protection,[186] whereas the IPPC Decree lays down specific rules applicable to the administrative control of IPPC installations.

General rules on administrative inspections

In order to investigate and assess the environmental impacts of the specific activities and check if the operator complies with the legal requirements, environmental audits can be carried out.[187] If as a result of the audit, the regional inspectorate detects that environmental damage was caused, or there was a risk of such damage, it may fully or partially restrict or suspend the activity of the installation.[188]

In addition to the environmental audit, the operator might evaluate its own environmental performance in form of the so-called 'environmental protection performance evaluation' and request the regional inspectorates to approve it.[189]

Moreover, operators shall inform the regional inspectorates on any significant changes concerning the activity of the installation.[190] In case of non-compliance with this obligation, the regional inspectorates may suspend the activity of the operator. The regional inspectorates shall also inspect ex-officio the changes in the conditions of the environmental permit. In case the conditions significantly deviate from the conditions existing at the time of permitting, the inspectorate shall order an environmental audit.[191]

IPPC specific rules on administrative inspections

In addition to the general rules, the IPPC Decree lays down specific rules applicable to the administrative control of IPPC installations. In accordance with Article 22(1) of the IPPC Decree, the regional inspectorates may introduce a so-called 'trial operation' for the installations. Before the end of the 'trial operation', but at the latest six months after it started, the competent authorities shall examine if the operation of the installation is in compliance with the requirements of the integrated environmental permit. For this purpose, the operator is required to provide the authorities with the following documents: document listing the equipments used in the installation, documents proving that the installation operates in compliance with the requirements of the integrated environmental permit.

Integrated environmental permits are valid for a period of at least 5 years but the installations get permits for a period more than 5 years as well. However, each 5 years the Regional Environment,

[185] Note that the numbers are estimated numbers, gathered through an interview with a representative of the Ministry of Rural Development.
[186] International Comparative Legal Guide Series, Environment Law, 2007, Hungary: According to Article 64 of the Environmental Protection Act, the enforcement of the administration of environmental protection is included within the scope of the administration of environmental protection.
http://www.iclg.co.uk/khadmin/Publications/pdf/1177.pdf
[187] Article 73(1) of Act LIII of 1995.
[188] Article 74(3) of Act LIII of 1995.
[189] Article 77 of Act LIII of 1995.
[190] Article 82(1) of Act LIII of 1995.
[191] Article 82(2) of Act No LIII of 1995.

Nature and Water Inspectorates have to carry out an administrative control in accordance with the rules applicable to the environmental audit.

In accordance with Article 22(3) of the IPPC Decree, the administrative authorities shall carry out 'site- visits' on a yearly basis in order to examine the execution of the requirements of the integrated environmental permit. At the end of the proceeding, the competent authorities shall prepare a report of proceedings. As the IPPC Decree does not specify the rules of site inspections, the general rules of Act CXL of 2004 are applicable.[192] As a general rule,[193] the operator shall be informed about the inspection in advance. Unless stated differently,[194] the person concerned can attend the inspection, which in principle is carried out during the operation of the installation.[195] The following table summarizes the rights and obligations of the inspectorates during the site inspection:

Table 3: Rights and Obligations of inspectors

Rights and obligations of inspectors[196]	
Rights	Obligations
11. entry 12. access to the file 13. monitor/examine the working process or other objects 14. request for information 15. record image and sound 16. sampling 17. seizure 18. other	5. preparing a report of proceedings 6. returning documents and physical evidences to the persons concerned or submitting them to the competent authorities

According to the IPPC Decree, depending on the result of the different type of administrative controls, the competent authorities may take the following administrative measures:

- Administrative measures laid down in Article 20(9) and (10):
  - obliging the operator to carry out environmental performance review; or
  - amending the requirements of the integrated environmental permit.
- Administrative measures laid down in Article 26:
  - imposing sanctions (see above in Table 1).

2.2.3. The inspectors' enforcing powers

There is no specific provision identified with regard to the inspectors' enforcing powers in the IPPC Decree, thus the rules of Act LIII of 1995 and Act CXL of 2004 are applicable.

In accordance with the general rules of Act CXL of 2004, the regional authorities may order temporary safety measures in form of seizure or pledging for cases when there is a risk that the operator does not fulfil his legal obligations.[197]

Moreover, during the inspection, the operators are obliged to provide the inspectors with access to the installations.[198] If it is necessary for the safe proceeding or the success of the administrative procedure,

[192] Procedural rules applied on site visits are laid down in Article 56- 57/B and 88-92 of Act CXL. of 2004. Note that Article 56-57/B regulates a specific type of inspections ('szemle') which is applicable when the observation of the person, movable property or immovable property is required in order to cleaning up the matters of fact. In accordance with Article 88(4), procedural rules laid down in Article 56-57/B are also applicable to on the spot/site inspections.
[193] Article 57(1) of Act CXL of 2004.
[194] Article 57(5) of Act CXL of 2004.
[195] Article 57/A(1) of Act CXL of 2004.
[196] Resource used: http://www.kszk.gov.hu/data/cms18125/7_tema_Hatosagi_ellenorzes.ppt
[197] Article 29/A of Act CXL of 2004.
[198] Article 57/A(3) of Act CXL of 2004.

the regional inspectorates may ask the police to attend.[199] In case the person concerned with the administrative procedure impedes the investigation, the regional inspectorates can seize the relevant physical evidences[200] and impose administrative fines on the person.[201] Moreover, if immediate actions are required (*i.e.* in case of danger of death) the regional inspectorates may enter in the installations without the agreement of the persons concerned.[202] This kind of control would require the approval of the public prosecutor, and the attendance a police official and an official witness, unless the process of asking for the approval of the public prosecutor would cause significant delays.

Enforcement of the decision of administrative authorities

As a general rule, the regional inspectorates shall ex-officio check if the operators fulfilled their obligations set by an administrative decision. In case of concern, the regional inspectorates may carry out an administrative control.[203] If the operator does not comply with the administrative decision, the regional inspectorates may start the execution procedure. The execution procedure might *inter alia* aim at:

- enforcing the fulfilment of a pecuniary obligation, such as payment of an environmental fine;[204] or
- ensuring that the operator carries out certain activity, such as compliance with the conditions set in the permit.[205]

The general rules of execution procedures are laid down in Act LIII of 1994 on judicial enforcement procedures.

As a specific rule, the decisions of the administrative authorities made concerning emergencies that pose hazard to or damage the environment shall be executed without delay, regardless of the appeal procedure.[206]

2.3. Appeal against the administrative decision

Any action or decision taken by the regional inspectorates can be appealed before the National Inspectorate for Environment, Nature and Water or a judicial court. The IPPC Decree does not include provisions on appeals against administrative provisions, thus the general rules of Act CXL of 2004 are applicable. Appeal procedures can start on the operator's request and/or ex-officio. The following table summarizes the different appeal proceedings identified. These are further described below.

Table 4: Appeal proceedings against administrative decisions

Appeals against administrative decisions	
Appeals on operator's request	Ex officio appeals
Appeal proceeding: *Articles 98- 108*	Proceeding within the competence of the authority taking the administrative decision : *Article 114*
Judicial review of administrative suit: *Articles 109- 111*	Surveillance procedure: *Article 115*
Retrial procedure: *Articles 112-113*	Proceeding on the basis of the decision of the Constitutional Court: *Article 117*
	Proceeding on the basis of the objection of the prosecutor:

[199] Article 57/B(1) of Act CXL of 2004.
[200] Article 57/B(2) of Act CXL of 2004.
[201] Article 57/B(3) of Act CXL of 2004.
[202] Article 57/B(4) of Act CXL of 2004.
[203] Article 129 of Act CXL of 2004.
[204] Article 132-137 of Act CXL of 2004.
[205] Article 140-142 of Act CXL of 2004.
[206] Article 95 of Act LIII of 1995.

Article 118-119
Appeals on the request of the operators/ ex officio
Request for: - Revision of an administrative resolution - Complementing an administrative resolution - Replacement - Annulment

2.3.1 By the operator

Appeal proceeding: The operator might appeal against any first instance decision of a regional inspectorate. The appeal shall be filed to the regional inspectorates,[207] which submit the appeal together with the supporting documents to the National Inspectorate for Environment, Nature and Water within 8 days. The National Inspectorate may approve, amend or annul the first instance decision. In case of annulment, the regional inspectorates may be ordered to conduct a new administrative procedure.

Judicial review of administrative suit: Any final decision of the competent authorities might be reviewed by judicial courts, based on the request from the operator or other actors of the procedure within 30 days. The competent administrative court might annul the final administrative decision and in case of need may order the administrative authority to conduct a new procedure.

Retrial proceeding: The operator might ask for the retrial of the procedure within 15 days from the appearance of *e.g.* a new information or fact. The request for retrial is decided by the regional inspectorates, which may amend or withdraw the final administrative decision or take a new decision.

2.3.2 By a person other than the operator

Proceeding within the competence of the authority taking the administrative decision: Both first and second instance authorities may amend or withdraw their decisions ex-officio in case of non-compliance with the legal requirements, within one year from communicating the decision with the parties.

Surveillance procedure: Within its ex-officio monitoring activities, the National Inspectorate may annul or amend the unlawful decisions of the regional inspectorates.

Proceeding on the basis of the decision of the Constitutional Court: Within its competence, the Constitutional Court may declare that a legal act is unconstitutional and thus exclude its application retrospectively. Following such decision, anyone can use his/her right of complaint and ask the administrative authorities to amend or annul their decisions.

Proceeding on the basis of the objection of the prosecutor: The public prosecutors might object to any decision, proceeding or omission of the competent authorities.

In addition, both the competent authorities and the parties might ask for the annulment, replacement, revision and/or completion of an administrative decision.[208]

3 Judicial procedure (if relevant-with a focus on criminal sanctions)

[207] Unless the regional inspectorate decides to correct, complement, amend, withdraw its decision, or dismiss the appeal without examination (*e.g.* belated appeal).
[208] Article 121 of Act CXL of 2004.

3.1 General information[209]

As noted above, there is no specific IPPC related criminal offence. Consequently, the general rules of criminal procedures are applicable, which are laid down in Act XIX of 1998 (Criminal Procedure Act). In practice, criminal procedures against IPPC installations are rare. Therefore, the rules described below are rather theoretical.

The court may only ascertain the criminal liability of an operator against whom an accusatory instrument was filed and only for acts contained in such instrument.[210] In principle, the following actors have the right to initiate and conduct a criminal procedure: court, public prosecutor,[211] the investigative authorities[212] and under certain circumstances the substitute private accuser.[213] The regional inspectorates shall ex-officio inform the investigative authorities in case of detecting the suspicion of a criminal offence. In 2010, there was only one case when a regional inspectorate initiated a criminal procedure against an IPPC installation.[214]

The operators are entitled the following rights during the different stages of the criminal procedure:

Table 5: Rights of operators during the criminal procedure

Operator/ Defendant	Stage of the criminal procedure	Rights
Suspect	In the course of investigation.	Article 43(2) of the Criminal Procedure Code: - receiving information on the suspicion, on the charge and any changes, - be present at actions and inspects, - be granted sufficient time and opportunity for preparing the defence, - file for legal remedy, - receiving information on his rights and obligations during the criminal proceeding, - present facts at any stage of the procedure, make motions and objections.
Accused	In the course of court procedure.	Article 43(3) of the Criminal Procedure Code: - contacting the defence counsel (if foreign the consulate) and communicate with them without control, - written and verbal communication with relatives under certain control, or with other persons under legal conditions laid down in Article 43 (3)(b).

Relevant facts for the application of criminal statutes and legal regulations on criminal proceedings are covered by evidences.[215] Inspection can be ordered and conducted by the court or the prosecutor to serve as evidence.[216] [217] In order to ensure the effectiveness of the criminal proceedings, coercive

[209] Special rules are applicable to the criminal proceedings against *inter alia* juvenile offenders (Part 5 of the Criminal Code), Military criminal proceedings (Chapter XXII) Procedures based on private accusation (Chapter XXIII), procedures against absent defendants (Chapter XXV) and Procedures against persons enjoying immunity (Chapter XXVIII).
[210] Article 2(3) of Act XIX of 1998.
[211] Article 28(1) of Act XIX of 1998: 'The prosecutor act as the public accuser'.
[212] Article 6(1) of Act XIX of 1998 : It is the responsibility of the court, the prosecutor and the investigating authority to initiate and conduct the criminal proceedings if the conditions set forth in this Act prevail.
[213] Article 53(1) of Act XIX. of 1998: '[…] the victim may act as a substitute private accuser if: (a) the prosecutor or the investigating authority rejected the report or terminated the investigation, (b) the prosecutor partly omitted the indictment, (c) the prosecutor dropped the case, (d) the prosecutor did not state any criminal offence that should be prosecuted based on the public accusation, consequently he did not file a charge, nor did he take over the representation of the indictment […], (e) the prosecutor dropped the charge in the trial because in his judgement, the criminal offence should not be prosecuted based on a public accusation.'
[214] More information on the case is included in one of the case-studies.
[215] The following constitute means of evidence in the Criminal Procedure Act: witness, expert opinion, physical evidence, documents and pleadings of the defendant.
[216] Rules on inspections are described under Article 119(1) of Act XIX of 1999.

measures can be applied.[218]

Unless otherwise stated in the Criminal Procedure Act, criminal proceedings start with an investigation. Investigation is ordered and carried out by the public prosecutor and/or the investigating authorities [219] on the basis of the data coming to the cognisance of the prosecutor, or the investigating authority within their official competence or in via a complaint.[220]

The investigation must commence as soon as possible, and in principle must be concluded within 2 months.[221] As an investigatory action, the prosecutor and/or the investigating authority may inter alia:

- collect data;[222]
- interrogate the operator.[223]

In principle, anyone affected may challenge the decision of the prosecutor and/or the investigating authority within 8 days.[224]

The prosecutor is responsible for filing the indictment to the court. The filing of the indictment cannot be subject to appeal. If the prosecutor has rejected the protest of the victim concerning the dismissal of the complaint or the termination of the investigation, a substitute private accusation may be lodged. Moreover, if the prosecutor has partially omitted the indictment, the victim may stand as a substitute private accuser.[225]

The court holds a trial to establish the criminal liability of the accused. The panel of the court adopts its decision after deliberation by way of voting. [226]

3.2 Possibilities of appeal

Act LI of 2006 introduced a tertiary appeal system in Hungary. In accordance with Article 13 of Act XIX of 1998, local courts and county courts are the first instance courts.
Second instance courts are:

- County courts in cases falling within the competence of local courts,
- Court of appeals (tribunals)[227] in cases falling within the competence of county courts,
- The Supreme Court in cases when the law allows appeal proceedings against the decisions of the courts of appeal (tribunal).

Third instance courts are:

- Courts of appeals (tribunals) in cases that were decided at the county courts at the second instance,

[217] Other evidentiary procedures are: Questioning on the scene, Reconstruction, Presentation for identification, Confrontation, and Concurrent hearings of experts.
[218] Coercive measure can infringe or restrict the fundamental rights of the citizens; in particular, coercive measures might restrict the freedom of movement, ownership, property rights, right to personal liberty. Under the Criminal Procedure Act, the following coercive measures can be imposed: custody, pre-trial detention, home curfew, house arrest and keeping away, temporary involuntary treatment in a mental institution, measure to warrant the prohibition to travel abroad, bail, search, body search and seizure, order to reserve date recorded by a computing technical system, sequestration and precautionary measures and securing the order of proceedings.
[219] Investigation falls under the exclusive competence of the public prosecutor in certain criminal offences listed in Article 29, which includes inter alia the following criminal offences: criminal offences committed by persons enjoying immunity due to holding a public offence, murder against a judge, criminal offences committed by a sworn members of the police.
[220] Article 170(1) of Act XIX of 1998.
[221] Rules of the deadlines for carrying out inspections are laid down in Article 176(1) and (2) of Act XIX of 1998.
[222] Applicable rules are laid down in Article 176(1) and (2) of Act XIX of 199.
[223] Applicable rules are laid down in Articles 179-180 of Act XIX of 1998.
[224] Article 195(1) of Act XIX of 1998
[225] Applicable rules are covered by Article 229(1) of Act XIX of 1998.
[226] Article 256(3) of Act XIX of 1998.
[227] The total number of courts of appeals (tribunals) in Hungary is 5: Tribunal of the capital, Tribunals of Pécs, Győr, Debrecen and Szeged.

- The Supreme Court in cases where the court of appeals (tribunals) decided on second instance.

Appeal procedure: The judgement of the court of first instance or any non-conclusive ruling of the court may be appealed[228] at the court of second instance.[229] The court of second instance may uphold, modify or repeal the judgement of the court of first instance, or reject the appeal.[230] The conclusive decision of the court of second instance might be appealed[231] at the court of third instance.[232] The court of third instance might uphold, modify, or repeal the judgement of the court of second instance contested with the appeal, or reject the appeal.[233]

Re-trial: The final judgment of the court may be subject to re-trial if ***e.g.*** new evidence is found which makes if probable that the defendant shall be acquitted.[234] Depending on the outcome of re-trial, the competent court might repeal the judgement or reject the re-trial if it is found unsubstantiated. [235]

Review: The final conclusive decision of the court might be subject to the review of the Supreme Court.[236] [237] The Supreme Court may uphold in effect, modify or repeal the contested decision.[238]

Legal remedy on legal grounds: The Prosecutor General may report a legal remedy to the Supreme Courts, which may reject the legal remedy, or find that the legal ground of the remedy is substantiated and thus ***i.e.*** acquit the defendant, or order the court to conduct a new procedure.[239]

Harmonisation procedure: If as a result of its harmonisation procedure, the Supreme Court finds that a doctrine on which the court established the criminal liability of the operator is unlawful it may repeal the unlawful disposition, acquit the defendant and terminate the criminal procedure.[240]

3.3 Administrative (quasi) criminal procedures

General information

There is no specific IPPC related administrative (quasi) criminal procedure, thus the general rules of Act LXIX of 1999 are applicable.

Administrative (quasi)criminal procedures start with a complaint or ex-officio by the relevant administrative authorities. With regard to IPPC related petty offences, the main administrative authorities are the notaries (e.g. for 'environment protection petty offence')[241] and the nature

[228] The following parties might be entitled to appeal: a.) accused, b.) the prosecutor, c.) the substitutive private accuser, d.) the counsel for the defence, e.) the heir of the accused, against orders granting a civil claim, f.) the legal representative, the spouse or common-law spouse of an accused of legal age against an order for involuntary treatment in mental institution, g.) private party, against whom a disposition has been made in the verdict, in respect of the relevant order, h.) those against whom a disposition has been made in the verdict, in respect of the relevant order.
[229] Article 347(1) of Act XIX of 1998.
[230] Article 370(1) of Act XIX of 1998.
[231] The following parties have the right of appeal under Article 367/A (1): the accused, the prosecutor, the substitutive private accuser, the defence counsel and the legal representative, spouse or common-law souse of the accused of legal age, against the order of involuntary treatment in a mental institution.
[232] Article 367/A(1) of Act XIX of 1998.
[233] Article 396(1) of Act XIX of 1998.
[234] Article 408(1) of Act XIX of 1998.
[235] Article 415(1) of Act XIX of 1998.
[236] Article 416(1) of Act XIX of 1998.
[237] As an example, the final conclusion of the court is subject to review if the defendant was acquitted of the procedure terminated, the criminal liability of the defendant established or the involuntary treatment in mental institution ordered in violation of the criminal substantive law.
[238] Article 426-428 of Act XIX of 1998.
[239] Article 431-438 of Act XIX of 1998.
[240] Article 439- 445 of Act XIX of 1998.
[241] Article 32 of Act LXIX of 1999.

protection authorities (e.g. for 'nature protection petty offence').[242] In principle, the deadline for completing administrative (quasi) criminal procedures is 30 days. [243]

Enforcement powers

If the administrative authorities notice the illegal conduct during an administrative control, they can impose a fine and process the administrative (quasi) criminal procedure on the site, unless additional evidence is required. [244]

Appeals

Complaint against decisions related to administrative proceedings: The operator and his/her legal representative as well as any person subject to administrative fine might lodge a complaint against the procedural decision of a competent administrative authority. The public prosecutor may decide reject or withdraw the administrative decision.[245]

Complaint against the administrative decision: The operator, his legal representative or the defence counsel might object the decision of the administrative authorities.[246] On the basis of the objection, the administrative authority may withdraw or amend the decision. If the administrative authority does not agree with the objection, it submits the motion to the competent local courts which may maintain or amend the decision of the administrative authorities.[247]

Review: The final conclusive decision of the court might be subject to judicial review. The competent first instance court might maintain or withdraw the decision of the court of first instance.[248]

Proceeding on the basis of the objection of the prosecutor: Based on the objection of the public prosecutor, the administrative authority may withdraw its decision. In case of disagreement, the administrative authority submits the objection to the competent courts. The court may approve the objection of the prosecutor and order the administrative authorities to conduct a new procedure in accordance with the objection of the prosecutor.[249]

4 Synergies between administrative, administrative (quasi) criminal and criminal procedures

As noted above, administrative procedures can be conducted alongside with criminal or administrative (quasi) criminal procedures. However, administrative (quasi)criminal and criminal procedures cannot be conducted at the same time.

The table below summarizes the procedural link-if any- between administrative, administrative (quasi) criminal and criminal procedures.

Table 6: Procedural links between administrative, administrative (quasi) criminal and criminal procedures

	Administrative	Administrative	Criminal

[242] Article 35 of Act LXIX of 1999.
[243] Article 82 (4) of Act LXIX of 1999.
[244] Article 133 of Act LXIXof 1999.
[245] Article 86 (3) and (4) of Act LXIXof 1999.
[246] Article 88 (1) of Act LXIXf 1999.
[247] Articles 88-89, 93-100 of Act LXIX of 1999.
[248] Articles 103- 110 of Act LXIX of 1999.
[249] Article 91 of Act LXIX of 1999.

		(quasi)criminal	
Administrative		+	+
Quasi-criminal	+		-
Criminal	+	-	

Administrative (quasi) criminal and criminal procedures: In accordance with Article 1(2) of Act LXIX of 1999 on petty offences, no petty offence can be if the action constitutes a crime. Moreover, Article 83(1)(e) of the Petty Offence Act requires the administrative authorities to cancel administrative (quasi) criminal procedure if there is an on-going criminal procedure in place against the operator for the same illegal conduct, or the liability of the operator for the same illegal conduct has already been declared within a previous criminal procedure. In accordance with Article 6 of the Criminal Procedure Code, no criminal proceeding can be conducted against an operator who has been declared liable in a court decision within the framework of an administrative (quasi)criminal procedure.

Administrative and administrative (quasi)criminal/criminal procedures: According to Article 107 of the Environmental Protection Act, the imposition of an environmental fine does not free anyone from criminal, administrative (quasi)criminal or civil liability, or from being obliged to limit, suspend or halt an activity; realizing protective measures or restoring the natural/previous state of environment'. Thus, an administrative procedure can be conducted along with criminal and/or administrative (quasi)criminal procedures.

There is no legal rule applicable to the procedural links between administrative and criminal/quasi-criminal procedures. In practice, criminal/administrative (quasi) criminal procedures often follow administrative procedures. This can be explained by the fact that the suspicion of a criminal offence/ administrative (quasi) criminal offence is often a result of an administrative procedure or becomes evident within the framework of an administrative procedure, *e.g.* during administrative control. Lodging a criminal/ administrative (quasi)criminal procedure does not suspend on-going administrative procedures, in other words the different procedures can be conducted in parallel.[250]

Based on the findings of the structured interviews it seems that the main reason for the limited number of criminal procedures against IPPC installations is the lack of knowledge. In other words, in most cases administrative authorities are not aware of the possibility of initiating criminal procedures. Moreover, no specialised unit exists within the office of the public prosecutor/investigated authorities dealing with environmental criminal offences. This situation will be changed in the future according to one of the judges of the Supreme Court, who emphasized that it is planned to set up a department within the Prosecution Office of the Prosecutor General dealing exclusively with environment related offences.

It is noted, that court procedures against IPPC installations often take place in form of administrative court procedures. In accordance with Article 109 of Act CXL of 2004 on administrative procedures, IPPC installations may appeal against the conclusive administrative decision before the competent administrative courts. According to Article 326(9) of Act III of 1952 on civil procedures, the competent administrative courts at first instance are the county courts. In principle there is no possibility to appeal against the decision of the court. However, on the legal basis of Article 340/A(2) of Act III of 1952, the Supreme Court may review the decision of the administrative court. In accordance with Article 340/A(3) of Act III of 1952, the IPPC installations may also ask for retrial.

[250] Information for this section was gathered through conducting interview with a representative of the Ministry of Rural Development.

5 Conclusions

Proportionality

Article 106 of the Environmental Protection Act requires the administrative authorities to adjust the amount of administrative fines to the severity of the environmental damage caused, the environmental pollution and the length and periodicity of the illegal conduct. The IPPC Decree also states that the level of fines should be proportionate to the negative environmental impacts of operators' activities.

In line with this above requirement, the competent authorities may impose fines/day for the period while the installation was operating without an environmental permit or without the performance of the preliminary environmental impact assessment.[251]

In addition to these legal conditions, some authorities suggested to take into consideration the financial capacity of the IPPC installations while imposing sanctions. They argued that in case of too high sanctions, the operators may close down the installations without restoring the environment, which is contrary to the main aim of the IPPC Decree.

One of the regional inspectorates argued that authorities shall impose more stringent sanctions on IPPC installations than on installations not falling under the obligation of obtaining an integrated environmental permit. According to the interpretation of the regional inspectorate, IPPC installations often cause more severe damage to the environment, than non-IPPC ones. The authority illustrated its argument through the following example:

In the given case, a chicken farm did not fill in the waste register. For this illegal conduct, the regional inspectorate imposed a fine of Euros 746 (HUF 200,000) on the chicken farm (IPPC installation). In case of a non-IPPC installation, this fine could have been disproportionate with regard to the insignificant character of the illegal conduct.

According to most of the practitioners,[252] the Hungarian legislation provides enough room for adjusting the sanctions to the illegal activity of the IPPC installation; however some argued that sanctions would be more efficient if taking the benefits gained from the illegal conduct and/or the costs of restoring the environment into consideration.

Those practitioners who did not find the current system of administrative sanctions proportionate enough argued that Euros 730 (HUF 200,000) as a minimum limit is too strict for some minor cases of non-compliances with permit conditions, whereas the maximum limit of Euros 1,826 (500,000) is too low for more serious breaches, or breaches which are repeated periodically.[253] In other word, the range of possible fines set by the legislation is too narrow.

According to Article 23 of the Petty Offences Code, sanctions and measures must be adjusted to the severity of the illegal conduct. While imposing administrative (quasi)criminal sanctions, the authorities must take into consideration the personal circumstances of the defendants and check if the operator has carried out similar or identical administrative (quasi)criminal offence during the past two years.

The Criminal Code reflects the principle of proportionality as it requires criminal sanctions to be

[251] Article 26 (3) of the IPPC Decree.

[252] Information gathered through the results of an informal questionnaire sent to the regional authorities.

[253] This example refers to the provisions of Article 26 §(3) of the IPPC Decree.

proportionate to the danger of the illegal conduct to the environment and the society, the degree of culpability and to other aggravating and mitigating circumstances.[254]

Effectiveness

According to most of the regional inspectorates, an administrative sanction can be seen as effective if:

- it contributes achieving the aim of the legal act;
- it forces the operator to fulfil his/her legal obligations;
- it shortly follows the illegal conduct; and
- it is personalised to the given operator.

In addition to the above listed criteria, it was one of the main findings of Case Study I (see in Annex) that a sanction cannot be seen as effective if it restrains the operator from restoring the state of environment on the site and/or from repairing the damage caused.

Dissuasiveness

According to the answers received from the regional inspectorates, a sanction is deemed to be dissuasive if it prevents the defendant and/or other operators from any illegal activity. The deterrent effect of administrative sanctions is well illustrated through the following example:

> In 2010, one of the regional inspectorates conducted a site visit in a chicken farm. As a result, the regional inspectorate noticed that the number of chickens was higher than 40,000 during 33 days of the year. Above the limit of 40,000 chickens, farms fall under the scope of IPPC Decree (Annex II (11) (a)), thus require an integrated environmental permit.
>
> On the legal grounds of operating an IPPC installation without an integrated environmental permit, the regional inspectorate imposed a fine of Euros 6,166 (HUF 1,650,000). Following this decision, the operator applied for an integrated environmental permit.

According to most regional authorities, warning the operators about the potential legal consequences of their illegal conduct is often preventive enough. In other words operators often start complying with their legal obligations before more severe sanctions would be imposed. Therefore, it is rare that criminal sanctions are imposed against operators, although the possible sanction of privation of freedom may have the most deterrent effect on the operator.

Based on the main findings of Case-study I, it can be argued that a sanction leading to the closure of the installations cannot be seen as dissuasive. Logically a given sanction has no preventive effect on an operator who terminated its activities due to the sanction imposed.

> In the given case, the IPPC installation was carrying out activities without a valid integrated environmental permit. Following a site-visit, the regional inspectorate prohibited the illegal activity of the IPPC installation. The IPPC installation appealed against the first-instance decision.
>
> A few months after taking the first-instance decision, the regional inspectorate carried out a regular site-visit on the site and noticed that the operator stopped its economic activities on the site. In other words the decision of the administrative authority led to the closure of the IPPC installation.

More details on the case are provided in the Annex of this Case-study.

[254] Article 83(1) of the Criminal Code.

Case studies

The cases studies below illustrate the nature of administrative sanctions (*i.e.* effective, dissuasive, and proportionate) applicable to IPPC installations and the procedural links between administrative and court procedures.

The first case study shows the lack of dissuasive character of the administrative sanction imposed. In the given case, the competent regional inspectorate prohibited the activity of the installation. Following the decision, the IPPC installation terminated its economic activities. The conclusion of the case is that a sanction cannot be seen as dissuasive, if as its consequence the operator stops the economic activities on the site.

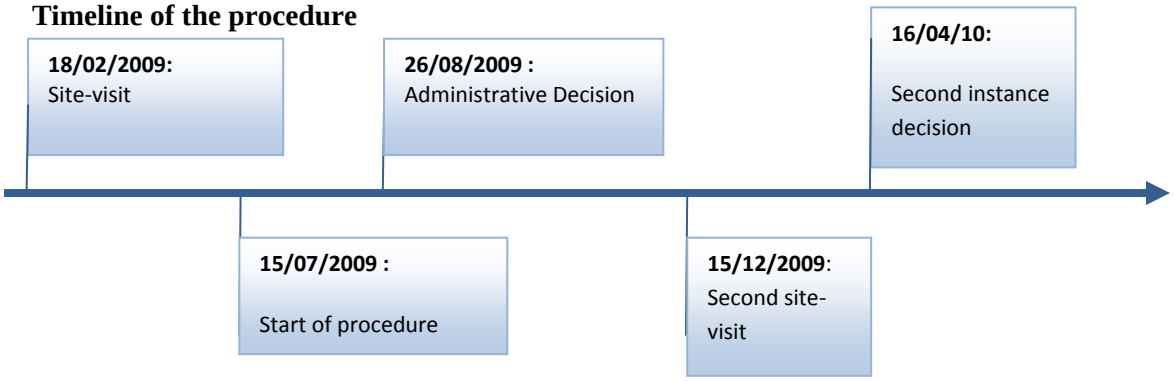
In the second case-study due to the administrative sanction imposed the IPPC installation stops the illegal conduct, cleans the site and installs the necessary equipment to prevent such illegal activities.

The third case illustrates the procedural link between administrative and court procedures. It also gives an example to cases when the administrative authorities apply different rules than those provided in the IPPC Directive (and its implementing IPPC Decree) for cases when an IPPC installation does not comply with its legal obligations. It is noted and explained below that such interpretation of the law by the competent administrative authority was wrong.

Case Study I: Administrative sanctions applicable to IPPC installations

Interviewee – Ms Gyöngyi Bejenaru-Sramkó[255]
Organisation and position: Ministry of Rural Development, Chief Counsellor (Environment Conservation and Development Department)
Telephone number: +36-1-795-2444
Date of interview: 15/04/2011

Timeline of the procedure



Description of the background

[255] With regard to the first two case studies, it must be noted that information was gathered through an interview with the Chief Counsellor of the Ministry of Rural Development (Ms Bejeranu- Sramko). When additional information was required on the case, the competent regional authority was contacted (Regional Environment, Nature and Water Inspectorate of Kozep-Dunavolgy) with the support of the Ministry of Rural Development, in the form of questionnaires. In certain instances, the regional authority was unable to provide information on the dates of the procedural steps, or the level of information provided was not sufficient to judge the nature of the sanction imposed (i.e. effectiveness, proportionality and dissuasiveness).

'B' Plc. was carrying out activities with a valid integrated environmental permit, which was amended by three administrative decisions during the period of 2006 and 2008.

In January 2009, 'B' Plc informed the Regional Environment, Nature and Water Inspectorate of Kozep-Dunavolgy (hereinafter referred to as regional inspectorate) about terminating its activities from the end of January. The company also notified the inspectorate about its intention of subletting the site to 'F' Ltd.

The scope of activities carried out by 'F' Ltd. was identical to the past activities of 'B' Plc, which covered *inter alia* the manufacture and placing on the market of chemical substances on their own, in mixtures, in preparations and in articles. These activities fall within the scope of Government Decree No. 314/2005 (XII. 25.) on Environmental Impact Studies and Integrated Environment Use Permits (hereinafter referred to as IPPC Decree) and are listed in its Annex II. It is important to note that while 'B' Plc possessed a valid integrated environmental permit, 'F' Ltd started its activities without such a permit.

In order to verify the above described situation, the regional inspectorate carried out a site visit on 18 February 2009.

On the basis of the main findings of the site visit the regional inspectorate started two administrative procedures, one against 'B' Plc and a second against 'F' Ltd.

Legislation applicable

Article 26(1) and 26(2) of the IPPC Decree: in case an installation operates without an integrated environmental permit, or without an environmental permit, the authorities may limit, suspend or prohibit the continuation of the illegal conduct. The decision of the authority depends on the decree of influence of the illegal conduct on the environment.

Procedure

On 15 July 2009, the regional inspectorate started the administrative procedure against 'F' Ltd's IPPC installation, on the legal basis of Article 26 of the IPPC Decree. This was communicated to the installation on the 17 July 2009. Following the official notice, 'F' Ltd declared the fact that it was carrying out activities without an integrated environmental permit.
The regional inspectorate did not accept the reasoning of the installation. It argued that during the site visit (18 February 2009) it was notified to 'F' Ltd that it was carrying out IPPC activities without an integrated environmental permit. Moreover, the installation was warned several times that no IPPC activity could be carried out without an integrated environmental permit.

Shortly after the regional inspectorate started the administrative procedure, 'F' Ltd requested to change the integrated environmental permit with regard to the name of the installation carrying out the IPPC activities on the site. This request was under consideration, when the regional inspectorate took its decision.

In its decision (26 August 2009), the regional inspectorate prohibited the operation of the installation on the legal basis of Article 26(1)(c) and informed the parties about their right of appeal. In the legal notice, the regional authority also informed the parties about the possibility of imposing additional sanctions (*i.e.* fine) in the future, on the legal basis of Article 26(3) of the IPPC Decree.

On 15 December 2009, the regional inspectorate carried out a site-visit and noted that the installation terminated all its activities on the site. The company also terminated the sublet on the site.

General comments on sanctions

While imposing the administrative sanction, the regional authority strictly interpreted the provision of Article 26(1) of the IPPC Decree. The main reason for prohibiting the activity of the installation was that 'F' Ltd carried out its activity without an integrated environmental permit.

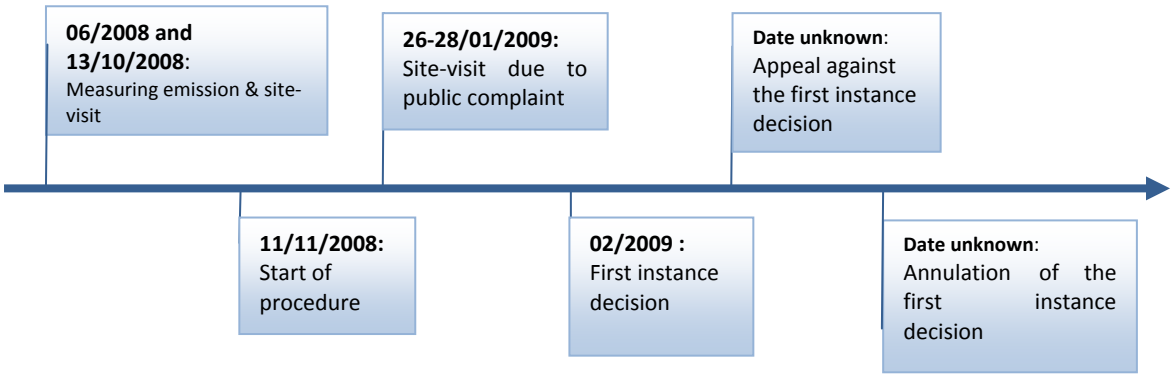
Following the decision of the regional inspectorate the company terminated the sublet and stopped all its economic activities on the site. With regard to this point the regional inspectorate stated that the given decision did not have a deterrent effect. In other word a sanction cannot be seen as dissuasive, if as its consequence, the operator stops its economic activities on the site.

Finally, it is important to note that 'F' Ltd appealed against the first instance decision of the authority. On the 16 April 2010, the decision of the first instance regional inspectorate was approved by the National Environment, Nature and Water Inspectorate as second instance administrative authority. As noted above, by the time the second instance decision was taken, the IPPC installation terminated its activities on the site.

Case Study II: Administrative sanctions applicable to IPPC installations

Interviewee – Ms Gyöngyi Bejenaru-Sramkó[256]
Organisation and position: Ministry of Rural Development, Chief Counsellor (Environment Conservation and Development Department)
Telephone number: +36-1-795-2444
Date of interview: 15/04/2011

Timeline of the procedure



Description of the background[257]

The main activity of 'E.' Ltd. was to prepare equipment from recycled metal for rail companies. The company possessed a valid integrated environmental permit, in accordance with Government Decree 314/2005 (XII. 25.) on Environmental Impact Studies and Integrated Environment Use Permits (hereinafter referred to as 'IPPC Decree'). The activity of the installation, namely 'foundry with a production capacity of over 20 tonnes per day' was listed in Annex II, point 2.4. of the IPPC Decree.

[256] Ms Bejeranu- Sramko also acted as a contact person while sending the structured interview questions to the competent regional inspectorates and to the national inspectorate. Through a written questionnaire the Regional Environment, Nature and Water Inspectorate of Kozep-Dunavolgy provided information for the above case-study.
[257] Where in the time-line the dates are indicated as unknown, it means that during the interviews no information was provided on dates.

Following a public complaint (from citizens), the Regional Environment, Nature and Water Inspectorate of Kozep-Dunavolgy measured the Carbon Monoxide (CO) emission from the foundry. As a result of measurement, the regional authority confirmed that the foundry exceeded the CO emission limit values set by the integrated environmental permit.

In addition to the activity of measuring the IPPC installation's CO emission, the regional inspectorate carried out a site-visit on the 13 October 2008. Following the site visit (and also in compliance with the findings of the previous environmental audit), the regional authority confirmed that blue gas was emitted to the ambient air from the installation. It was assumed that this coloured gas was the by-product of the recycling process.

Following the site-visit, the regional authority informed the operator about the fact that its operation was not in compliance with the provisions of the integrated environmental permit and started the administrative procedure.

Legislation applicable

Article 26 (5) of the IPPC Decree: if an installation endangers the environment or causes environmental pollution or does not comply with an administrative decision, the authorities may impose the legal sanctions listed in Article 26(1) of the IPPC Decree.

Article 26(1) of the IPPC Decree: the administrative authorities may limit, suspend or prohibit the activity of an IPPC installation, depending on degree of influence of the illegal conduct on the environment.

Procedure

As noted above, the administrative procedure was preceded by an activity of measuring the CO emission from the site, which was carried out in June 2008 and by a site visit in October 2008. The administrative procedure was launched in November 2008. The regional inspectorate communicated its decision to the IPPC installation and asked the installation to notify any remarks within 3 days from the communication of the legal notice.

Following the legal notice received, the IPPC installation informed the regional inspectorate about terminating the emission which had previously exceeded the limit values set by the integrated environmental permit. In order to prove this fact, the installation enclosed an expert opinion, which underpinned that the CO emission of the installation was below the limit values set by the integrated environmental permit.

Following further public complaints, the regional inspectorate decided to measure the emission of the installation. During the second measurement (26-28 January 2009), the installation temporary ceased its operation and argued that the high level of CO emission was a result of the temporary malfunctioning of the installation.

As a result of the second measurement of emissions, the regional authority notified that the activity of the installation was not in compliance with the integrated environmental permit. Consequently the regional inspectorate ordered the installation to install an equipment to constantly measure the emission from the installation and automatically stop the production in case of exceeding the emission limit values set by the integrated environmental permit.[258]

[258] By installing such equipment, the IPPC installation has become subject to a constant administrative control. The legal basis for imposing constant administrative control on the installation was Article 8 of Ministerial Decree No. 17/2001 (VIII.

In addition to the above listed, the regional inspectorate noticed that hazardous waste was disposed of on the site of the installation. The integrated environmental permit explicitly prohibited the installation from accepting or treating hazardous waste on its territory. Consequently the activity of the installation did not comply with the requirements of the integrated environmental permit.

General comments

In its first instance decision, the regional inspectorate suspended the activity of the installation, on the legal basis of Article 26(1) and (5) of the IPPC Decree.

The main criteria which determined the sanction imposed was the infringement of the requirements of the integrated environmental permit. The fact that the installation did not comply with the obligation imposed by the authority with regard to the establishment of a measuring instrument, was also taken into consideration. In addition, the IPPC installation treated hazardous waste, which was considered as the infringement of the first point of the integrated environmental permit.

The installation appealed against the first instance decision of the regional inspectorate and asked the National Environment, Nature and Water Inspectorate as second instance authority to cease the first instance decision and list its obligations along with their respective deadlines.

The National Environment, Nature and Water Inspectorate annulled the first instance decision of the regional authority. The legal reasoning behind this decision was not communicated by the interviewee.

The decision of the regional inspectorate to suspend the activity of the operator was effective. This can be underpinned by the following factors: (1) the industrial installation cleaned the site of the hazardous waste; (2) it installed an equipment to constantly measure the emission from the installation. With regard to this last point it must be noted that the order of the administrative authority (namely the order to install measuring equipment) took place before the first instance decision, but based on the information received from the interviewee the industrial installation decided to install this equipment only after the decision. This point is important, that it shows the effect of the administrative decision on the industrial installation, namely that it started to comply with its legal obligations and with the main objective of the IPPC Decree (*i.e.* protecting the environment).

Case Study III: Procedural link between administrative procedures and procedures before courts

Interviewee: Dr Peter Darak and dr Fruzsina Bogos[259]
Organisation and position: Supreme Court, judge; Court of the Capital, judge
Telephone number: 06 30 328 90 30; (06-1) 458 5449
Date of interviews: 10/05/2011; 11/05/2011[260]

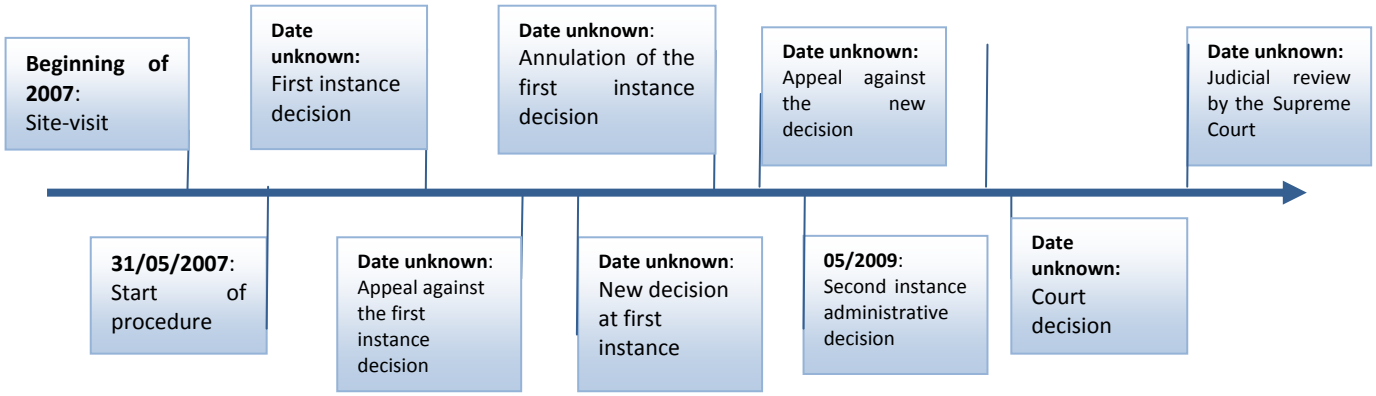
Timeline of the procedure

Date unknown: Appeal against the administrative decision

3.) on the rules applicable to the administrative control and evaluation of the environmen f stationary pollution sources.

[259] The interviewees were not aware of the dates of all procedural steps or could not provide su formation to judge the nature of the sanction imposed (e.g. proportionate, effective and dissuasive). These aspects are reflected in Case study III.

[260] Where in the time-line the dates are indicated as unknown, it means that during the interviews no information was provided on dates.



Description of the background

The industrial installation started its activities in 2003. At that time, it possessed a valid environmental permit. On 1 January 2006, the legislation transposing the IPPC Directive (96/61/EC) entered into force, in form of Government Decree 314/2005 (XII. 25.) on Environmental Impact Studies and Integrated Environment Use Permits (hereinafter referred to as 'IPPC Decree'). In accordance with the IPPC Decree, existing installations needed to apply for integrated environmental permit before October 2007. In compliance with this requirement, the industrial installation continued the same activities as before, but with an integrated environmental permit.

The scope of activity of the installation covered the treatment and the recovery of waste. According to the integrated environmental permit, the installation was entitled to treat 1000 tonnes/year of cinder, slag and furnace dust, and 1550 tonnes/year land waste containing land and stone. The activity of the installation covered two counties, with the exception of 7 settlements. As regards to the capacity of the installation and the territorial coverage of its activity, the industrial installation could be considered as large.

In this case the installation was carrying out waste treatment activities in contravention of the conditions set by the environmental permit. Following a site visit, the Regional Environment, Nature and Water Inspectorate (hereinafter referred to as the 'regional inspectorate') started the administrative procedure against the installation.

Legislation applicable

The IPPC installation was carrying out activities with an integrated environmental permit. As described above, the industrial installation did not comply with the conditions of the permit, while carrying out waste-treatment activities. According to the practice followed and in compliance with Article 26(4) of the IPPC Decree, the regional inspectorate should have imposed the legal consequences listed in Article 26(4). This Article states that if an operator does not comply with the permit conditions, the regional inspectorate may impose a fine; oblige the operator to comply with the permit conditions; or order the operator to prepare a programme of measures/carry out an environmental review within 6 months from the communication of the decision. The regional inspectorate imposed a waste-treatment fine on the operator,[261] on the legal basis of Article 49(1) of Act XLIII of 2000 on Waste Treatment (hereinafter referred to as 'Waste Treatment Act'). The interviewee assumed that the main reason for imposing the fine on the legal basis of the Waste Treatment Act and not on the IPPC Decree was the novelty of the IPPC Decree.

[261] In case of waste-treatment fines, there is not fixed fine (minimum or maximum fine) that the authorities can impose on operators. The amount of fine often varies depending on the size of the installation and the severity of the illegal conduct etc.

Procedure

Within its competence of administrative control, the regional inspectorate carried out a site-visit at the beginning of 2007. Following the site-visit, the regional inspectorate started an administrative procedure against the installation on 31 May 2007. As a result of the first instance procedure, the regional inspectorate imposed a waste-treatment fine of 5,530,887 HUF (Euros 20,786) on the industrial installation.

The first instance decision of the regional inspectorate was appealed before the second instance authority (National Environment, Nature and Water Inspectorate) on the legal basis of Article 98 of Act CXL of 2004 (Administrative Procedures Act), which annulled the first instance decision. The interviewee could not specify the legal reasoning behind the decision of the second instance authority. However, the interviewee assumed that it was probably due to procedural mistakes made during the first instance administrative procedure. This can be underpinned by the fact that shortly after the annulment of the first instance decision a second fine (same amount as the first fine) was imposed on the industrial installation. The regional inspectorate did not carry out additional procedural steps before imposing the fine.

This administrative decision was appealed by the installation, but was kept in force by the national inspectorate in May 2009.

Following the second instance administrative decision, the industrial installation appealed against the first instance decision of the regional inspectorate before the competent court, on the legal basis of Article 109 of Act CXL of 2004. In case of administrative litigations, the competent first instance court is the county court. In the particular case, the competent court was the County Court of Szabolcs-Szatmar-Bereg (hereinafter referred to as country court). The county court upheld the decision of the defendant (regional inspectorate) and rejected the request of the plaintiff (industrial installation). In cases, when there is an appeal procedure against the decision of the administrative authorities, the county court can take the final conclusive decision. Against such decision there is no possibility to appeal.

On the legal basis of Article 340/A of Act III of 1952 on Civil Procedures, the Supreme Court reviewed the decision of the administrative court. As result of the judicial review, the judgement of the administrative court was approved.

General comments

On the basis of the information received the criteria determining the amount of the sanction imposed by the regional inspectorate is not clear. However, it can be assumed that the main reason was the large size of the installation and the severity of the infringement. This argument would be in line with the reasoning of the Supreme Court's judgement, which stated that there was no possibility to decrease the amount of fine imposed on the industrial installation, as the infringement of the operator was not marginal. The Supreme Court also considered the fact that the activity endangered the environment moreover it referred to the speciality of the case, namely the size of the installation.

It is important to emphasize, that the industrial installation was providing services in two counties. With regard to the size of the installation, the amount of the fine imposed cannot be seen as proportionate. Based on the information received, it is not possible to judge if the sanction was effective and/or dissuasive.

Thus it is not possible to compare if a waste treatment fine or a fine under the regime of the IPPC Decree could have been more dissuasive, proportionate and effective.

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Annex V- Spain

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in Spain

Executive Summary

In Spain, criminal environmental offences are broad and cover general crimes (e.g. against natural resources, flora fauna and domestic animals). The Criminal Code does not contain any specific criminal sanctions for the infringement of the transposing provisions of the IPPC Directive, nor regarding to any other specific environmental legislation. These infringements can only be considered criminal offences if they, for instance, seriously endanger the balance of natural systems through emission, discharge of pollutants in the environmental media. In contrast, environmental administrative offences are much more precise. The classification of administrative offences and their related sanctions are set in each specific sectors of the environment legislation.

An administrative procedure and a criminal procedure cannot be initiated in parallel when the same facts and persons are involved. Administrative and criminal sanctions cannot be cumulative. The administrative procedure shall end if it is considered that the infringement is a criminal offence *(non bis in idem principle).*

The sanctioning power of the administration is strictly regulated in order to protect the right of the defence (three procedural steps: initiation, investigation, resolution). The time to issue an administrative sanction cannot exceed six months from the initiation of the administrative procedure.
Apart from issuing sanctions, the administration is empowered to set interim emergency provisional measures in order to stop the continuation of the damage or situation of risk such as the temporary, full or partial closure of the installation, the cessation of installation operations, and the temporary suspension of the permit which is considered to be a very effective measure. These measures can be agreed before the initiation of the sanctioning administrative procedure. The administration can also require the offender, without prejudice to the criminal or administrative sanction, to restore the environment to the previous state, as well as pay the damages; in case the offender does not obey this obligation, the competent authority can agree on the imposition of coercive fines.

There are several possibilities to appeal against the decision of the administration (either before the authority issuing the sanction, the higher authority or before the administrative Courts in last resort). Together with the operator of a classified establishment; other interested parties can appeal against the decision of the administration. This is the case for environmental NGOs, but they have to fulfil very specific requirements that limit their enforcing power.

Criminal procedure is often initiated by Nature Protection Services of the Guardia Civil (the federal police force), together with the municipal police that provide information on potential environmental crimes to the Public Prosecutor *(Ministerio Fiscal).* However, it is important to note that pursuant to the popular action *'accion popular'* both natural and legal persons, whether or not offended by a criminal offence can lodge a complaint to the Criminal Court. The standing requirements are much less stringent than the ones under the administrative procedure. Environmental criminal offences can be resolved under a fast-track criminal procedure, although the procedure does not seem to be made for such crimes. There is no equivalent under the administrative procedure.

The Autonomous Communities (CCAA) are competent for the inspection and enforcement of environmental legislation. Even though inspection procedures for classified establishments are not harmonised in all CCAA, several inspection requirements are similar (e.g. necessary assistance and collaboration from the operator during the inspection visits).

The Table 1 below indicates the provisions of the IPPC Directive covered by administrative sanctions in Spain. Criminal sanctions are not listed in the table as there are no specific sanctions in the Criminal Code, which would punish the infringement of the transposing provisions of the IPPC Directive (see Section 3.1 for more details). Moreover, the category of administrative (quasi) criminal sanctions does not exist in Spain, thus this column is left blank in the table below.

Table 1: Enforceable provisions covered by penalties in Spain

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	Article 32(1)(c) of the Law 16/2002		
4	Article 32(1)(a) (b) of the Law 16/2002		
5	-		
6	Article 32(1)(b) of the Law 16/2002		
12 (1)	Article 32(1) (b) of the Law 16/2002		
12 (2)	Article 32(1)(a) (b) of the Law 16/2002		
14 (a)	Article 32(1)(a) (b) of the Law 16/2002		
14 (b)	Article 32(1)(b) of the Law 16/2002		
14 (c)	Article 32(1)(b) of the Law 16/2002		

1. Applicable sanctions

The Spanish Constitution (CE) recognises everyone's right to an adequate environment and duty to preserve it. Article 45(3) specifies that for those that violate this duty, there should be criminal or, where required, administrative sanctions, as well as the obligation to restore the damage caused. It is the only case for which the Constitution foresees the establishment of sanctions in case of breaches of a Constitutional duty.

Administrative sanctions are the most common tools for the enforcement of environmental legislation in Spain. The classification of administrative offences and their related sanctions are set in each specific sectors of the environment legislation (e.g. Law 16/2002 on classified installations,[262] Law on water,[263] and Law 10/1998 on waste[264]) that list the different offences classified as petty offences (*faltas leves*), serious offences (*faltas graves*) and very serious offences (*faltas muy graves)* and their corresponding administrative sanctions. The IPPC Directive is transposed by the Law 16/2002 of 1st July 2002 on classified installations, which sets offences provisions and their related administrative sanctions that can lead to a fine (up to Euros 2,000,000), definitive or temporary closure of all or part of the installation, the prohibition to exercise a professional activity for a certain time period, the revocation or suspension of the approval for a certain time period and the publication of the sanctions.

Environmental sectoral laws do not list any specific criminal offences. Criminal environmental offences and their related sanctions are only mentioned in Chapter III Title 16 of the Spanish Criminal Code. These offences are broad and cover general crimes against natural resources and the environment and also crimes related to the protection of the flora, fauna and domestic animals. The Code does not contain any specific criminal sanctions for the infringement of the transposing provisions of the industrial emission Directives, nor regarding any other specific environmental legislation. Environmental criminal offences can lead to financial penalty (maximum Euros 300,000) or imprisonment (maximum four years)

The Table 2 below details the different types of offences and related administrative penalties in Spain. Criminal offences and sanctions are not listed as there is no criminal sanction specific to breaches of industrial emission legislation.

[262] Law 16/2002 concerning integrated pollution prevention and control *(Ley 16/2002, de 1 de julio, de prevención y control integrados de la contaminación.)*
[263] Royal Decree 1/2001 approving the consolidation of the Law on water (Real Decreto Legislativo 1/2001, de 20 de julio, por el que se aprueba el texto refundido de la Ley de Aguas)
[264] Law 10/1998 on waste *(Ley 10/1998, de 21 de abril, de Residuo).*

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related administrative penalties in Spain

	Administrative sanctions	
	Offences	**Penalties**
Obligation to apply for a permit for new or existing installations	Very serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000; - Definitive closure of all or part of the installation; - Temporary closure of all or part of the installation not less than two years and not more than five years; - Prohibition to exercise this activity for a period not less than one year not more than two years; - Revocation or suspension of the approval for a period not less than one year no longer than five years; - Publication, through the means considered appropriate, of the sanctions, once they have become definitive. ***Article 32(1)(a) of the Law 16/2002***
	Serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people. ***Article 31(3)(a) of the Law 16/2002***	Sanctions related to serious offences - Fine from Euros 20,001 to 200,000; - Temporary closure of all or part of the installation for a maximum period of two years; - Prohibition to exercise this activity for maximum one year; - Revocation or suspension of the approval for a maximum period of one year. ***Article 32(1)(b) of the Law 16/2002***
Obligation to supply information for application for permits	Serious offence Hide or modify maliciously the information required in the procedures regulated in this Law. ***Article 31(3)(c) of the Law 16/2002***	Sanctions related to serious offences - Fine from Euros 20,001 to 200,000; - Temporary closure of all or part of the installation for a maximum period of two years; - Prohibition to exercise this activity for maximum one year; - Revocation or suspension of the approval for a maximum period of one year. ***Article 32(1)(b) of the Law 16/2002***
	Petty offence Failure to comply with the requirements established in this Act or rules adopted pursuant thereto, unless it is classified as very serious or serious offence. ***Article 31(4)(b) of the Law 16/2002***	Sanctions related to petty offences Fine up to Euros 20,000. ***Article 32(1)(c) of the Law 16/2002***

	Administrative sanctions	
	Offences	**Penalties**
Obligation to notify the competent authority of any changes in the operation of an installation	Very serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2)(a) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000; - Definitive closure of all or part of the installation; - Temporary closure of all or part of the installation not less than two years and not more than five years; - Prohibition to exercise this activity for a period not less than one year not more than two years; - Revocation or suspension of the approval for a period not less than one year no longer than five years; - Publication, through the means considered appropriate, of the sanctions, once they have become definitive. ***Article 32(1)(a) of the Law 16/2002***
	Serious offence Operate an installation or conduct a substantial modification of the installation without the integrated environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people. ***Article 31(3)(a) of the Law 16/2002*** Not communicating the competent authority the non substantial modifications made in the installations. ***Article 31(3)(a) of the Law 16/2002***	Sanctions related to serious offences - Fine from Euros 20,001 to 200,000; - Temporary closure of all or part of the installation for a maximum period of two years; - Prohibition to exercise this activity for maximum one year; - Revocation or suspension of the approval for a maximum period of one year. ***Article 32(1)(b) of the Law 16/2002***
Obligation to comply with the conditions set in the permit or mandatory ELV's	Very serious offence Failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people. ***Article 31(2) (b) of the Law 16/2002***	Sanctions related to very serious offences - Fine from Euros 200,001 to 2,000,000; - Definitive closure of all or part of the installation; - Temporary closure of all or part of the installation not less than two years and not more than five years; - Prohibition to exercise this activity for a period not less than one year not more than two years; - Revocation or suspension of the approval for a period not less than one year no longer than five years; - Publication, through the means considered appropriate, of the sanctions, once they have become definitive. ***Article 32(1)(a) of the Law 16/2002***
	Serious offence Failure to comply with the conditions established in the integrated	Sanctions related to serious offences - Fine from Euros 20,001 to 200,000;

	Administrative sanctions	
	Offences	**Penalties**
	environmental authorisation without incurring damage or serious deterioration to the environment nor seriously endangering the safety or health of people. ***Article 31(3) (b) of the Law 16/2002***	- Temporary closure of all or part of the installation for a maximum period of two years; - Prohibition to exercice this activity for maximum period of one year; - Revocation or suspension of the approval for a maximum period of one year. ***Article 32(1)(b) of the Law 16/2002***

Article 149(1)(23) of the Constitution of 1978 provides that the State has exclusive competence on matters related to the protection of the environment without prejudice to powers of the Autonomous Communities *(Comunidades Autonomas)* (CCAA) to take additional protective measures. In other words, the CCAA can provide more stringent and detailed environmental measures than the environmental legislation issued by the State which is regarded as a minimum legislation. With regard to environment, the CCAA pursuant to Article 148(1)(9) of the Constitution of 1978 are competent in the management of environmental matters. This provision implies that the CCAA are competent for the inspection and enforcement of environmental legislation and that they have sanctioning power.[265] For instance the Law 16/2002 on classified installations explicitly provides that the Autonomous Authorities are competent to take measures on control and inspection for the enforcement of this Law (the State being competent for the control of discharges in basin shared by different CCAA). It also states that the offences encompassed in its Article 31 shall be without prejudice to the ones that can be established by the Autonomous authorities.

Several CCAA (e.g. Cataluña, Andalucía, Cantabria, Pais Vasco) but not all of them (e.g. Asturias, Madrid Community) have established their own administrative sanctioning regime for the infringement of environmental legislation. Related to classified installations the majority of the CCAA refer to the same offences that the ones listed in Law 16/2002 on classified installations (e.g. the operation of an activity without the integrated environmental permit, or failure to comply with the conditions set in the integrated environmental permits). However the sanctions sometimes differ from the ones set in Law 16/2002. For instance the failure to comply with the conditions established in the integrated environmental authorisation provided that there has been a serious injury or damage to the environment or such situation seriously endangered the health or safety of people can lead to a fine up to Euros 3 million in Cantabria,[266] Euros 2,4 million in Andalucía,[267] Euros 2,5 million in Aragon,[268] while under Law 16/2002 the same offence can lead to a fine of a maximum of Euros 2 million.

It is important to note that even though CCAA are competent to establish their own administrative sanctioning regime for the infringement of environmental legislation, the sanctions they apply shall never be less stringent than the ones set at the State level. Furthermore the Constitutional Tribunal has stressed that administrative sanctions issued by CCAA should not introduce unreasonable and disproportionate differences with the legal regimes applied in other parts of the territory.[269]

2. Administrative procedure

2.1 General elements on the legal tradition and potential evolution

Article 25(1) of the Spanish Constitution (CE) provides that no one may be convicted or sentenced for actions or omissions which, when committed, did not constitute a criminal offence, misdemeanour or administrative offence under the law then in force. Article 25(3) of the CE specifies that the Civil Administration may not impose penalties which directly or indirectly imply deprivation of freedom. Finally as mentioned above Article 45(3), related to the protection of the environment, specifies that criminal or, where applicable, administrative sanctions shall be imposed, under the terms established by the law.

[265] See decision of the Constitutional Court *(Tribunal Constitucional) STC 102/1995, FJ 2 y18)*
[266] Law of Cantabria 17/2002 on integrated environmental controls *(Ley de Cantabria 17/2006, de 11 de diciembre, de Control Ambiental Integrado)*
[267] Law 7/2007 on integrated management of the environment *(Ley 7/2007, de 9 de julio, de Gestion Integrada de la Calidad Ambiental)*
[268] Law 7/2006 on the environment protection in Aragon *(Ley 7/2006 de 22 de junio de proteccion ambiental de Aragon)*
[269] See decision of the Constitutional Court *(Tribunal Constitucional)* 87/1985

These Articles of the CE set the basis of the sanctioning power of the administration in Spain. The Jurisprudence of the Constitutional Tribunal has developed general principles on this sanctioning power which can be summarised as follows:[270]

- The sanctioning power of the administration shall be subject to the principle of legality and shall be mentioned in laws;
- The administration cannot issue penalties that deprive personal freedom except for the military disciplinary regime;
- The respect for the rights of the defense enshrined in Article 24 of the CE shall apply to the sanctioning administrative procedures;
- The sanctioning power of the administration shall be subordinated to the authority of the Judiciary, (e.g. the administrative jurisdiction *(Jurisdiccion contencioso-administrativa)* is empowered to control the legality of the administrative sanctions);[271]

The Supreme Tribunal *(Tribunal Supremo)* stressed that administrative and criminal sanctions could be considered equivalent since they were both part of the same *ius puniendi* of the State. It however outlined the specific characteristics of administrative sanctions as follows:

- Subjective element: the administrative sanction is imposed by the administration; the criminal sanction is imposed by the criminal judge.
- Formal element: the administrative sanction is imposed after an administrative procedure while the criminal penalty is imposed after a criminal procedure. The difference is not only in the process as such, but also in the powers given to the instructed authority and the regime applicable for the suspension of the immediate execution nature of the sanction, which is much more favourable towards the individual in criminal law than in administrative law.
- Objective element: the content of administrative sanctions does not basically differ from the content of criminal ones, with the exception of imprisonment which can never be an administrative sanction. However there is a difference in the effects, as administrative sanctions do not have the social recrimination component present in criminal sanctions. This is emphasised by the fact that criminal sanctions will be entered on the personal record of the individual.
- Liability: in criminal law only physical persons can be held individually liable, whereas administrative law admits the liability of legal persons, and joint and several liabilities of physical persons.

In Spain, the administrative authority having sanctioning power, apart from sanctions, can also issue coercive measures and interim measures.

Interim measures or provisional orders can be imposed once the sanctioning procedure has been initiated or under certain circumstances even before. The objectives of the interim measures are, on the one hand, to ensure the efficiency of the possible final decision and, on the other, to protect the public interest, including stopping the negative effects derived from the infringement. Pursuant to Article 35 of the Law 16/2002 on classified installations the competent authority, can order to stop the continuation of the damage or situation of risk, the temporary, full or partial closure of the installation, the cessation of installation operations, the temporary suspension of the permit.

Coercive measures are considered means of forced execution. These measures imply the use of force and are based on the previous infringement of the sanction or obligation of restoration imposed by the

[270] Sentencia del Tribunal Supremo 77/1983

[271] Article 24 of the CE reads as follows: All persons have the right to obtain effective protection from the judges and the courts in the exercise of their rights and legitimate interests, and in no case may there be a lack of defence.
Likewise, all have the right to the ordinary judge predetermined by law; to defence and assistance by a lawyer; to be informed of the charges brought against them; to a public trial without undue delays and with full guarantees; to the use of evidence appropriate to their defence; not to make self-incriminating statements; not to plead themselves guilty; and to be presumed innocent. The law shall specify the cases in which, for reasons of family relationship or professional secrecy, it shall not be compulsory to make statements regarding allegedly criminal offences.

administration. Their aim is to override non-compliance and force the offender to comply with the due behaviour. For instance Article 36 of the Law 16/2002 on classified installations provides that when the offender does not fulfill the obligation of replacement or restoration […], the competent authority may decide to impose coercive fines which shall not exceed one third of the fine prescribed for the infringement.

Finally the competent authority can or must impose accessory measures (e.g. revocation of a permit, impossibility for the company to obtain public subsidies). It is not clear whether these accessory measures are considered sanctions or not.[272] They can only be imposed as complements to a main sanction. Consequently, they are conditioned by the imposition of a main sanction.

The sanctioning power of the administration is very coercive in Spain. Administrative sanctions are in many aspects similar to criminal sanctions. They are very strict (e.g. to operate a classified installation can lead to a fine up to Euros 2,000,000) and can be considered as coercive measures. As mentioned above together with criminal sanctions they are part of the iuris puniendi of the State. This sanctioning power is however strictly controlled and regulated through the Law 30/1992 and its implementing Order that sets several procedural steps in respect of the right of the defence. There was no major reform related to the administrative sanctioning procedure since Law 30/1992 has been in force.

2.2 Inspections

2.2.1 General information

As mentioned above, the CCAA pursuant to Article 148(1)(9) of the CE are in charge of the management of environmental matters. This provision implies that the CCAA are competent for the inspection and enforcement of environmental legislation. The CCAA are the most important actors in the domain of environmental inspection in Spain. At national level the Ministry of Internal Affairs *(Ministerio de Interior)* is in charge of the inspection of installations falling under the SEVESO II Directive while SEPRONA *(Servicio de Proteccion de la Naturaleza- Service for the protection of nature),* the section of the Civil Guard (*Guardia Civil*-sort of federal quasi-military police) specialised in environmental issues provides technical support to the inspection bodies of the CCAA.

The inspections of installations falling under the scope of the IPPC Directive are thus carried out at the CCAA level. Information on the number of inspectors involved in the inspection of classified installation, the ratio number of inspectors/number of installations, number of visits per year, are not available for all Spain. This information can however be found for each CCAA. The CCAA elaborate inspection plans and programmes where this information can be available. For instance pursuant to its 2011 inspection programme, Andalucia is planning to carry out 178 inspections on IPPC installations this year.

2.2.2 Key elements of the inspection procedure

Legal requirements for the inspectors and operators during the inspections differ from one CCAA to another since they are competent to set their own inspection procedures.

Here are examples of different environmental inspection procedures in CCAA that apply for the enforcement of the transposing provisions of the IPPC Directive.

i) Andalucía

[272]If the legislator has not expressly classified these measures as accessory measures or sanctions it will depend on the Constitutional Tribunal and Supreme Tribunal to decide whether these measures are a sanction or not. It is noted that they are normally considered as sanctions as they imply the loss of an advantage.

The environmental inspection procedure in Andalucía is regulated under Article 130 of the Law 7/2007.[273]

Competencies and obligations of inspectors
Inspectors shall provide the description of the relevant facts and especially those that could constitute an administrative infringement. They shall take also into account the allegations made by the person responsible for the activity or facility. Inspectors are allowed to request any information necessary to perform their inspection.

Obligations of the operator
Operators shall provide necessary assistance and collaboration and enable entry into the facilities to those engaged in the activities of surveillance, inspection and control.

The inspectors' enforcing powers
The Law 7/2007 does not provide administrative measures that can be taken by inspectors in case of infringement or endangerment of public health or of the environment (e.g. closure or sealing of the installation).

ii) Pais Vasco

The environmental inspection procedure in Pais Vasco is regulated under Articles 106 and 107 of the Law 3/1998.[274]

Competencies and obligations of inspectors
Inspectors shall be authorised to access the facilities covered by this Law, if necessary without notice, after identification. Inspectors shall provide the description of the relevant facts that can potentially lead to an infringement. They shall take also into account the allegations made by the persons in charge of the activity or facility inspected.

Obligations of the operator
This Law does not mention any specific obligations to be fulfilled by operators.

The inspectors' enforcing powers
This Law does not provide any specific enforcing power to inspectors. It however states that under exceptional circumstances and prior to the initiation of the sanctioning administrative procedure, the competent authority may adopt preventive measures such as suspension of the operation of the activity, the sealing of apparatus, equipments or vehicles, and any other relevant measures to prevent the spreading of environmental damage.

iii) Cataluña

The environmental inspection procedure in Cataluña is regulated under Articles 74, 75, 76 and 77 of the Law 20/2009.[275] This procedure is very detailed.

Competencies and obligations of inspectors
Inspectors shall verify whether the environment conditions set in the environmental permits are fulfilled. Inspections can take place at any time, regardless of any regular inspection planning. Inspectors are empowered to access installations without prior notice to the operators. They are empowered to investigate, and do any examinations they consider necessary to verify whether the laws

[273]Ibid. Page 2
[274] Law 3/1998 on the protection of the environment in Pais Vasco *(Ley 3/1998, de 27 de febrero, general de protección del medio ambiente del País Vasco*)
[275] Law 20/2009 on the prevention and environmental control of activities *(Ley 20/2009, de 4 de diciembre, de prevención y control ambiental de las actividades)*

and regulations are correctly observed. They can also take samples of the pollutants produced by the activity. They can require information from the owner and/or the staff of the activity as deemed necessary to clarify facts that are subject to inspection. Reports of the inspection shall be issued in presence, where possible, of the individual owner or the authorised representative of the activity concerned.

Obligations of the operator
The owners of the activities shall provide necessary assistance to duly authorised staff of the administration during the inspection, especially to collect samples and necessary information.

Inspectors' enforcing powers
This Law does not provide any specific enforcing power to inspectors. It however states that inspectors are authorised to be present in case of the sealing, partial or total closure of activities.

In Spain, inspectors are not specifically empowered to issue administrative sanctions.

The sanctioning power of the administration is regulated by Law 30/1992 and it's implementing Order.[276] This Law applies to the Administration of the State *(La Administración General del Estado),* the administrative authorities of the CCAA *(las administraciones de la communidades autonomas)* and to the local administration bodies *(Las Entidades que integran la Administración Local).* In other words the same general sanctioning power rules apply to the different types of administrative authorities across the country (but the CCAA's laws can be always more restrictive). This law is, however, applied as a subsidiary instrument where a given administrative law does not provide a specific regime as regards the imposition of sanctions or interim measures. Title IV of the Law 16/2002 which transposes the IPPC Directive sets specific sanctioning regimes for the infringement of the provisions of the law, including temporary, total or partial closure of the installation.

The infringement procedure shall be transparent and interested parties have the right to know the current state of the procedure and to access and obtain copies of the documents contained therein. This procedure contains three steps, the initiation *(la iniciacion),* the investigation *(instruccion)* and finally the resolution *(resolucion).*

It shall be initiated by the competent administrative authority either on it own initiative, based on a request from an administrative body higher in the hierarchy, a reasoned request from an other administrative body not competent, or a complaint from a member of the public. During the investigation the parties concerned have 15 days to provide any arguments, documents or information deemed relevant and, where appropriate, propose concrete proof justifying their allegations, then the competent authority shall formulate a draft resolution determining the infringements and the sanctions. This draft resolution shall be notified to the persons concerned that have 15 days to formulate arguments and present orally the documents they consider relevant to the competent authority. The resolution, which contains the decision whether or not to impose a sanction, shall be adopted within 10 days of the reception of the draft decision, documents allegations, information provided during the procedure. The time limit to issue a resolution cannot exceed six months from the initiation of the procedure.

2.3 Appeal against the administrative decision

2.3.1 By the operator

[276] Law 30/1992 on the legal regime of public administrations and the administrative procedure *(Ley 30/1992, de 26 de noviembre, de Régimen Jurídico de las Administraciones Públicas y del Procedimiento Administrativo Común y el Real Decreto 1398/1993)*

Recipients of the administrative sanction can appeal this decision before the relevant hierarchical administrative authorities. Such appeal *(recurso administrativo de alzada)* can only be used when administrative sanctions do not put an end to the administrative procedure. This appeal must be resolved and the decision notified within three months. When the decision notified on the appeal is not satisfactory or there is no decision, an appeal may be lodged before an administrative court within two months or within 6 months in case of silence from the administration.[277]

In case the administrative sanctions put an end to the administrative procedure then the recipients of the administrative sanctions can appeal this decision directly before the administrative courts *(recurso contencioso-administrativo)* within two months or six months in case the administration did not provide decision. Alternatively the recipients of administrative sanctions can appeal before the competent authority issuing the sanction *(recurso potestativo de reposicion).* This appeal must be notified within one month only then the recipients of the administrative sanction are allowed to lodge an appeal before the administrative courts within two or six months, depending on whether there was an express or a tacit decision on the appeal.[278]

CCAA have their own Courts (e.g. Administrative Courts) and a Supreme Tribunal for cases under their competences, but these are enshrined in the national system and are hierarchically inferior to the State Supreme Tribunal. If the administrative decision affects more than one CCAA or falls under the competence of the State then an appeal shall be lodged to the Central Administrative Court *(Juzgado Central de lo Contencioso Administrativo).*

The procedure before the administrative Court is quite long. It often happens that the final decision is adopted two or three years after the action was brought before the Court.[279]

2.3.2 By a person other than the operator

Pursuant to Article 31 of the Law 30/1992 interested parties that can initiate an administrative procedure are:

- Those who promote the administrative action as holders of legitimate individual or collective interest and rights,
- Those who have not initiated a procedure but whose rights may be affected by the decision taken in the procedure,
- Those who have not initiated a procedure but whose legitimate individual or collective interests may be affected by the decision and become a party to the procedure before the final decision on the procedure is made;

Associations representing economic and social interests would be deemed to have a collective interest as laid down in the legislation.

Pursuant to Article 19 of the Law 29/1998 regulating the administrative court procedure, the following interested parties can challenge an administrative decision before an administrative court:

- Legal or natural persons having legitimate individual or collective interests and rights;
- Corporations, associations, unions which are affected or are legally entitled to protect collective rights and interest;

[277] See Article 46 of the Law 30/1992
[278] Ibid.
[279] E. Pozo Vera, *Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member States, National, Report Spain*, Milieu Ltd, Brussels (2004)

- The State administration when holding rights or interests to challenge acts and provisions of the Administration of the Autonomous Communities, and the administration of the CCAA when holding rights or interests to challenge acts and provisions of the State administration.

Pursuant to Article 22 of the Law 27/2006 transposing the Aarhus convention,[280] the acts and where appropriate, omissions attributable to public authorities which contravene requirements related to the environment (e.g. the protection of water and soil, air pollution, chemical substances, waste management) may be appealed by environmental NGOs, that shall meet specific criteria in accordance with the administrative appeal procedure set in Law 30/1992 and the administrative Court procedure set in Law 29/1998.

These criteria are as follows:

- The aims in its by-laws expressly include the protection of the environment in general or of any particular element thereof;
- It was legally established at least two years before the action is brought and has been actively pursuing the aims provided in its by-laws;
- It performs its activity pursuant to its by-laws in a territory that is affected by the administrative act, or if applicable, omission.

It is important to note that administrative acts and omissions from natural or legal persons assuming public responsibilities, exercising public functions or providing public services related to the environment under the responsibility of the State or CCAA Government or State and CCAA administrations are exempted from Article 22 of the Law 27/2006 and environmental NGOs will not be directly entitled to challenge these acts and omissions.

As a conclusion, not only the operators of an activity falling under the scope of the IPPC Directive that received an administrative sanction can lodge an appeal against this decision. For example environmental NGOs fulfilling strict criteria are entitled to challenge it. The State administration, having legitimate interest, can also challenge before the Court the administrative sanctions set by a CCAA administration. Conversely the CCAA administration, having legitimate interest, can challenge to the Court administrative sanctions set by a State administration.

3. Judicial procedure

3.1 General information

As already mentioned above criminal environmental offences and their related sanctions are only mentioned in Chapter III Title 16 of the Spanish Criminal Code. These offences are broad and cover general crimes against natural resources and the environment and also crimes related to the protection of the flora, fauna and domestic animals. This Code does not contain any specific criminal sanctions for the infringement of the transposing provisions of the IPPC Directive.

Article 325 of the Criminal Code, however provides that, the infringement of laws and other general provisions, which aims are to protect the environment, leading to emissions, discharges, radiations, extractions or excavations, silting, noise, vibration, injection, deposit, in the atmosphere, soil, subsoil or inland water, groundwater, sea, including high sea, catchments that could seriously undermine the balance of natural systems shall be considered as a criminal offence.

[280] Law 27/2006 of 18 July regulating the rights to access information, the participation of the public and access to justice in environmental matters *(Ley 27/2006, de 18 de julio, por la que se regulan los derechos de acceso a la información, de participación pública y de acceso a la justicia en materia de medio ambiente (incorpora las Directivas 2003/4/CE y 2003/35/CE).*

In other words infringements of the transposing provisions of the IPPC Directive (e.g. the emission limit value standards), can lead to a criminal sanction, if they can seriously endanger the balance of natural systems.[281]

Article 326 amongst other provisions considers as aggravating circumstances of the criminal offences mentioned above the fact that activities were operating without obtaining the required authorisation or administrative approval or disobeyed the orders of the administrative authority for correction or suspension of the activities or provided wrong environmental information or impeded the administration inspection activities.

These aggravating circumstances are similar to certain administrative offences related to the infringement of the transposing provisions of the IPPC Directive.

Criminal Law in Spain sets two types of criminal offences either misdemeanours *(faltas)* or crimes *(crímenes)* depending on the seriousness of the criminal offences.

There is no specific criminal procedure for environmental criminal offences. The relevant criminal procedure and the competent criminal Courts are determined by the types of criminal offences. The Magistrate Court *(Juzgado de Instrucción)* of the district is competent for misdemeanours. When dealing with crimes different judicial bodies are competent. The Magistrate Court of the District where the crime took place carries out the investigation. In very serious cases the Central Court of Instruction (*Juzgado de Instrucción Central)* does the investigation. Depending on the seriousness of the crime are competent to issue a judgement, the Juror Court *(tribunal del Jurado),* the Court of Criminal *(Juzgado Penal)* or the Provincial Penal Court *(Sala de lo Penal de Audiencia Provincial),*

Most of the time the Nature Protection Service of the Guardia Civil, together with the municipal police and forest guards are the ones that provide information on potential environmental crimes to the Public Prosecutor *(Ministerio Fiscal)* that reports the criminal offence to the Magistrate Court, the judicial body competent to instruct the investigation. In case the Magistrate Court considers that the facts constitute a crime, the Public Prosecutor can formulate the accusation to initiate the trial.

It is however important to note that pursuant to Articles 101 and 270 of the Law on criminal procedure, any person, whether or not offended by a criminal offence can lodge a complaint to the Judge of the Magistrate Court, the so called 'popular action'*(acción popular)*. [282] The Jurisprudence of the Supreme Tribunal *(Tribunal Supremo)* has interpreted these provisions in a way that not only natural persons can lodge this popular action but also legal persons, public institutions and organisms.[283]

In other words environmental NGOs are entitled to lodge a complaint to the judge of the Magistrate Court when they consider that an environmental criminal offence was committed.

The criminal procedure for criminal offences related to flora and fauna is shorter than the procedure for criminal offences endangering the balance of natural systems. Crimes against flora and fauna are easier to prove than crimes against natural systems, which require much more scientific analyses (e.g. on impact of pollutants and chemicals) and different expert opinions. Such elements are often used as a strategy by the defence to extend the length of the procedure.

[281] The jurisprudence of the Supreme Tribunal considers that this type of crime is based on an abstract endangerment (See Sentencias Tribunal Supremo 14 February 2001 and 25 October 2002)
[282] Law of criminal procedure *(Ley de Enjuiciamento Penal)*
[283] Sentencia Tribunal Supremo 79/99

Finally, Articles 795 to 803 of the Law on criminal procedure set a fast-track criminal investigation and prosecution for offences punishable by imprisonment not exceeding five years, or with any other sanction, not exceeding ten years, whatever its pecuniary amount, provided, that criminal proceedings are initiated under a police report and the judicial police has arrested a person and made him/her available to the Police Court *(Juzgado de Guardia)*.

The environmental criminal sanctions enshrined in the Criminal Code do not exceed five years of imprisonment. Therefore this fast-track procedure can apply to those who have committed environmental criminal offences under Chapter IV of the Criminal Code. This requires, however, a policy report and the arrest of the alleged person that committed the environmental offence. This fast track procedure was designed for 'in flagrante delicto' criminal offences and it is less likely to apply for environmental crimes relate to the infringement of the IPPC requirement because of the difficulty to prove them.

3.2 Possibilities of appeal

Appeals *(recurso de apelación)* against the judgement of the Court of Criminal jurisdiction can be lodged either by the public prosecutor, the offender, and other parties (e.g. environmental NGOs) before the Penal Chamber of the Provincial Court *(Sala de lo penal de Audencia Provincial)* within a timeframe of 10 days from the issue of the judgement.[284]

The decision of the Penal Chamber of the Provincial Court can then be appealed to the Second Chamber of the Supreme Tribunal *(recurso de casacion)* by the public prosecutor, parties involved in the case and their heirs within a time-frame of five days from the issue of the judgement. Parties involved shall be present at the Second Chamber of the Supreme Tribunal respectively 15 days after the issue of the judgement of Penal Chamber of the Provincial Courts (20 days for Isla Baleares, 30 days Canarias y Ceuta y Melilla).[285]

No specific time-frames are set for the issue of the judgements.

4. Synergies between administrative and criminal procedures

Pursuant to the principle of *ne bis in idem* (not twice for the same), there cannot be accumulation of administrative and criminal sanctions for the same facts. If an administrative procedure has been initiated with the objective of imposing a sanction, and the competent authority considers that the facts could constitute a criminal offence, it should stop the procedure and transfer the case to the criminal jurisdiction.[286] Only if the criminal jurisdiction considers that the situation cannot be qualified as a crime, the administrative body is empowered to continue the administrative procedure. The imposition of a criminal penalty excludes the possibility of imposition of an administrative sanction if it involves the same facts and same persons.

5. Conclusions

5.1 Preliminary conclusions

Proportionate

[284] See Book V of the Law on criminal procedure *(Libro V de la Ley de Enjuiciamento Penal)*
[285] Ibid.
[286] Article 7 of the Law 30/1992 on administrative procedure

The Law 16/2002 transposing the IPPC Directive provides different administrative offences classified as petty offences *(faltas leves),* serious offences *(faltas graves)* and very serious offences *(faltas muy graves)* and their corresponding administrative sanctions. Such gradation of offences leaves room to punish an infringement on the basis of the individual severity of the violation and can be assessed as fulfilling the criterion of proportionality.

Effective

The administration is empowered to set interim emergency measures in order to impede the continuation of the damage or situation of risk such as the temporary, full or partial closure of the installation, the cessation of installation operations, and the temporary suspension of the permit.[287] These measures are considered to be quite effective.[288]The administrative procedure to issue a sanction contains several procedural steps in order to respect the right of the defence; it shall not exceed 6 months. Sanctions can be appealed before the administration itself and then to the Administrative Courts. The overall procedure is quite long and thus may lack of effectiveness (e.g. administrative court proceedings can last two or three years after the action was lodged). Environmental NGOs can challenge administrative sanctions (or their omissions) but they have to fulfil very strict criteria which limit their role in the procedure.

The Criminal Court procedure can be quite long and thus not very effective. Environmental criminal offences can however be resolved under a fast-track criminal procedure, although this procedure does not seem to be made for such crimes. One of the positive aspects about the Spanish criminal procedure improving its effectiveness is that any person, whether or not offended by a criminal offence can lodge a complaint before Criminal Courts under the 'popular action'.

Dissuasive

The administrative sanctions are quite stringent, they can lead to a fine (up to Euros 2,000,000)[289], definitive or temporary closure of all or part of the installation, the prohibition to exercise a professional activity for a certain time period, the revocation or suspension of the approval for a certain time period and the publication of the sanctions. They can thus be considered dissuasive. It is significant to note that the dissuasive aspect of administrative sanctions was particularly taken into account by the Spanish legislator under Article 32(2) of the Law 2002/2 that provides that when the amount of the fine is lower compared to the benefit of the infringement, it shall be increased at least up to twice the amount the offender has benefited.

Criminal fines are less dissuasive than the administrative ones (maximum Euros 300,000). Environmental criminal offence can however lead to imprisonment penalties. The privation of freedom (maximum four years) has a significant deterrent effect compared to administrative sanctions.

[287] Article 35 of the Law 16/2002 on classified installations

[288] E. Pozo Vera, *Study on measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member States, National, Report Spain*, Milieu Ltd, Brussels (2004)

[289] Even more in certain CCAA (e.g. 3 million euros in Cantabria[289], 2.4 million euros in Andalucía[289], 2.5 million euros in Aragon[289], while under Law 16/2002 the same offence can lead to a fine of 2 million euros.

Case studies

Case Study 1

Introduction

For this case study information was provided by Javier Vera Janín, Director of the Section on inspection and control of the Environmental Department of the Government of the Autonomous Community of Navarra. This case study covers an IPPC installation, but the sanctioning procedure mentioned here deals with the infringement of the transposing provision of Article 9(1) of Directive 1999/13/EC[290] (Volatile Organic Compounds Directive) requiring operators to demonstrate to the Competent Authorities that they comply with emission limit values in waste gases, fugitive emission values and total emission limit values.[291]

Article	Key enforceable provisions of the Volatile Organic Compounds Directive
Article 5(2)(a)	Installations shall comply with the emission limit values and other requirements laid down in Annex IIA;
Article 5(2)(b)	Installations shall comply with the reduction scheme requirements specified in Annex IIB.
Article 5(4)	For installations not using the reduction scheme, any abatement equipment installed after 1999 shall meet all the requirements of Annex IIA.
Article 5(5)	Options for installations where two or more activities are carried out, each of which exceeds Annex IIA thresholds, (e.g. each activity must meet specified requirements individually).
Article 5(6)	Substances or mixtures classified as Carcinogenic, Mutagenic or toxic to Reproduction (CMR) because of VOCs content shall be replaced, as far as possible by less harmful substances or mixtures within the shortest possible time.
Article 5(8)	Certain discharges of halogenated VOCs assigned risk phrases R40 or R68 where the mass flow is $\geq$ g/h shall comply with emission limit value of 20 mg/Nm3.
Article 5(9)	Discharges of VOCs classified as CMR or assigned risk phrases R40 or R68 after Directive enters into force have to comply with the para. 7 & 8 ELVs within shortest possible time.
Article 5(10)	All appropriate precautions to be taken to minimise emissions during start-up & shut down.
Article 9(1)	Operators have to demonstrate compliance to the satisfaction of the Competent Authorities with: — ELVs in waste gases, fugitive emission values & total ELVs, — the requirements of the reduction scheme under Annex IIB. Solvent management plans according to Annex III can demonstrate compliance. Gas volumes added to waste gas for cooling or dilution purposes shall not be considered when determining mass concentration of the pollutant in the waste gas.
Article 9(2)	Compliance shall be re-verified following a substantial change.
Article 10 (a)	The operator shall inform the competent authority and take measures to ensure that compliance is restored within the shortest possible time

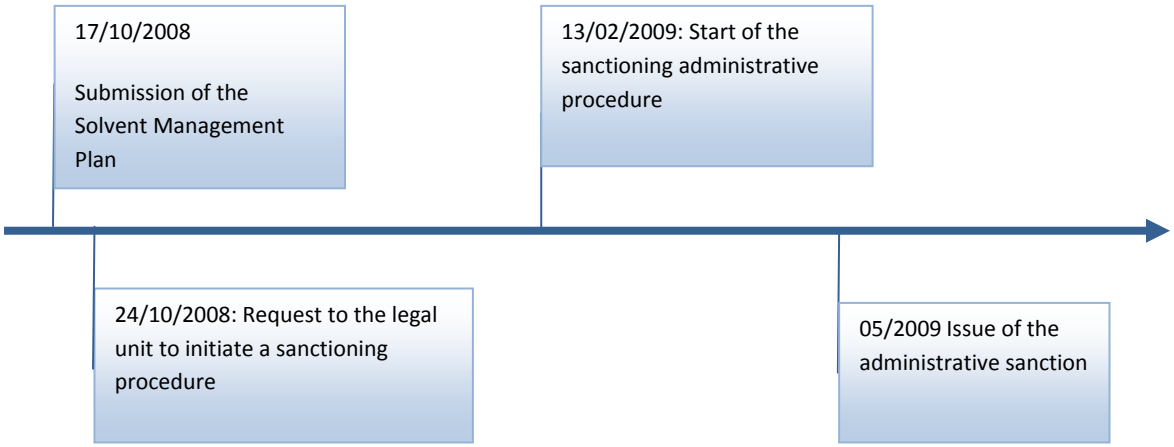
The sanctioning procedure started in October 2008 and ended by an administrative sanction in May 2009. The operator did not appeal the sanction to the administrative Court. Overall the time period

[290] Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvent in certain activities and installations

[291] No case studies were provided on the sanctioning procedure for the infringement of a transposing provision of the IPPC Directive by the environmental departments of the Autonomous Communities, in charge of enforcement of environmental law in Spain.

from the establishment of the infringement and the issuance of the sanction was quite short, nearly 8 months. The operator did not lodge an appeal to the administrative Court.

Timeline of the procedure



Description of the background

The facility is an industrial plant that produces aluminium car rims. The installation is located in Navarra. It was granted an integrated permit in 2007.[292]

The operator sent to the competent authority its 2007 Solvent Management Plan. The Competent Authority established infringements to the provisions of Directive 1999/13/EC on Solvents[293] and the corresponding transposing legislation in Spain.

Legislation applicable

The legislation applicable here is the Directive on Volatile Organic Compounds, and its transposing legislation in Spain, the Royal Decree 117/2003.[294] These rules establish that the operator shall demonstrate to the competent authority that it complies with emission limit values in waste gases, fugitive emission values and total emission limit values of solvents.

Infringements to the Royal Decree 117/2003 can be sanctioned according to the Law 16/2002 concerning integrated pollution prevention and control.[295] However, as already mentioned in the country detailed study, the Autonomous Communities are competent for the inspection and enforcement of environmental legislation and are entitled to set their own regime of sanctions related to the environment. This is the case in Navarra where infringements to the Royal Decree 117/2003 are sanctioned under the Law of Navarra 4/2005 of March 2005.[296]

This law sets a range of pecuniary sanctions:

[292]This is equivalent to an IPPC authorisation.
[293]Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, *OJ L 85, 29.3.1999, p. 1–22.*
[294]Royal Decree 117/2003 of 31 January, on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations *(Real Decreto 117/2003, de 31 de enero, sobre limitación de emisiones de compuestos orgánicos volátiles debidas al uso de disolventes en determinadas actividades).*
[295]Law 16/2002 concerning integrated pollution prevention and control *(Ley 16/2002, de 1 de julio, de prevención y control integrados de la contaminación.)* Royal Decree 117/2003 does not contain any sanctions but for sanctions refers to the Law 16/2002.
[296] Regional Law 4/2005 22 March on intervention for the protection of the environment *(Ley Foral 4/2005, de 22 de marzo, de intervención para la protección ambiental).*

Euros 20,000 for minor infringements;
Euros 200,000 for serious infringements;
Euros 2,000,000 for very serious infringements;

In this particular case the legal department of the competent authority considered the infringement as minor.

The procedure

The operator submitted to the competent authority its 2007 solvent management plan on October 17, 2008.

The solvent plan showed that fugitive emissions exceeded the threshold limit value of the solvents directive. Fugitive emissions were 69% of solvent input whereas the limit set by the Directive is 20%.

The unit in charge of the Solvent Directive made a request to the legal unit to initiate a sanctioning procedure on October 24, 2008. Following the procedure set in the Law of Navarra 4/2005, the legal unit informed the municipality about the infringement.

The municipality decided not to initiate the sanctioning administrative procedure due to lack of technical and legal resources.

Finally, the regional Government of Navarra initiated the sanctioning administrative procedure on February 13, 2009. The regional Government proposed a sanction in the procedure of Euros 10,000.

The operator pleaded not guilty on March 29, 2009 because by the end of 2008 he had built a new painting installation with a thermal unit to oxidize the volatile organic compounds.

The legal unit considered the allegations partially and finally imposed a sanction of Euros 5,000. The operator did not lodge an appeal against this administrative decision to the Court. The procedure ended on May 13, 2009.

General comment

The legal unit considered the infringement as minor because the amount of solvents used by the operator in 2007 was under the threshold of the IPPC Directive (200 Tm/year).[297]

The punishment was established taking into account that the range for minor offenses is up to Euros 20.000. The Government of Navarra decided that the sanction should be in the middle of the range. Finally the allegations made by the operator were partially considered during the sanctioning administrative procedure.

The sanction has deterred the perpetrator from repeating infringements and since 2009 the operator complies with all permit conditions.

[297] Annex I point 6(7) of the IPPC Directive on categories of activities covered by this Directive: Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

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Annex VI- The Netherlands

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in the Netherlands

Executive summary

In the Dutch legal system, both criminal and administrative penalties can be imposed for a breach of the legislation on industrial installations. In principle, these two enforcement systems have different aims - ensuring compliance (i.e. administrative penalties) and a punishment (i.e. criminal penalties) function respectively. Administrative fines are the exception, as they have a punitive character.

Since 1st October 2010, administrative measures related to breaches of rules implementing the IPPC directive in the Netherlands have been primarily taken on the basis of the Act on General Provisions Environmental Law (Chapter 5 on enforcement). Before this date, such administrative measures were regulated by the Environmental Management Act (Chapter 18 on enforcement).

The General Administrative Law Act was and is still applicable next to the abovementioned acts. This framework act contains general rules of Dutch administrative law, for instance definitions. It provides a comprehensive toolkit of enforcement measures to the competent authorities. The Act lists four types of administrative sanctions for offences that can apply to both natural and legal persons:

- administrative order subject to a financial payment (dwangsom); a restorative (reparation) measure which aims at full or partial reversing the effects of the violation; it is a non-punitive coercive measure that in practice is used far more than the other measures
- administrative enforcement / coercive order (bestuursdwang); a non-punitive coercive measure
- administrative fines; a punitive sanction for minor offences
- revocation of the permit; this can be a punitive sanction as well as non-punitive measure

As for enforcement through criminal law, the public prosecutor's office can instigate criminal proceedings against cases in which environmental law obligations are violated. Violations of the rules as laid down in the main pieces of environmental law (notably working without a permit or in violation of the conditions of a permit under the Act on General Provisions Environmental Law and the Environmental Management Act) are punishable as economic offences in the Economic Offences Act. It is within the Dutch public prosecutor's discretion to decide whether to prosecute or not (whether it is 'opportune' to do so). The policy line agreed upon in this respect is to prosecute only violations of core provisions of environmental legislation (as set out in the Instruction on enforcement of environmental law). Some cases are subject to transaction between the prosecutor and the perpetrator while other cases are brought into court.

The table below indicates the Articles of the IPPC Directive covered by sanctions in the Netherlands. The category of administrative (quasi) criminal sanctions does not exist in the Netherlands, thus this column is left blank in the table below.

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	-		
4	Article 1.1(3) of WABO together with Article 2.1(e) of WABO	Article 2.1(2) of BOR (which cross-refers to Article 2.1(e) of WABO	
5	Article 1.1(3) of WABO together with Article 2.1(e) of	Article 2.1(e) of WABO which is referred to in	

	WABO	Article 2.1(2) of BOR	
6	Article 4.2 of AWB and Article 4.4. of BOR	-	
12 (1)	Article 2.1.(1)(e)(2) of WABO	Article 2.1.(1)(e)(2) of WABO	
12 (2)	Article 2.1.(1)(e)(2) of WABO	Article 2.1.(1)(e)(2) of WABO	
14 (a)	Article 2.1(e) of WABO together with Article 5.5 of BOR	Article 2.3 of WABO together with Article 1(a) sub paragraph 1 of WED	
14 (b)	Article 5:7 sub paragrap 2 BOR, Article 17.2 Wm juncto Articles 5.1 and 5.19 WABO	Article 2.1 WABO and Article 1a subparagraph 2 of WED	
14 (c)	Article 5.20 AWB		

Introduction

This report describes the procedures relating to enforcement of the IPPC Directive[298] under Dutch law. It is based on jurisprudence, background articles, guidelines, interviews and examples from case studies. Furthermore, the report provides an overview of the administrative and criminal procedures as applied in the Netherlands.

Until recently, the Environmental Management Act (WM)[299] was the only primary legislation in the Netherlands regulating industrial installations. In October 2010, however, the Act on General Provisions Environmental Law (WABO)[300] entered into force, which created an integrated licensing system regarding several activities that affect the physical environment. The Act regulates the issuing of permits concerning construction, housing, monuments, space, nature and environment, which previously fell under separate permit regimes. The obligations established under the WABO are further detailed in the Decree on the Law on Environment (BOR)[301] and the Ministerial Regulation on the Law on Environment (MOR).[302]

Before the enactment of the WABO, Chapters 8 (installations) and 18 (enforcement) of the WM and the Water Act governed the issuing of permits related to the IPPC Directive. The functions of the WM with regard to the enforcement of environmental law are transferred to the WABO (Article 18.1a WM). The other WM provisions, and the provisions of the Water Act covering direct discharge in surface waters, remain in force. Whereas the WABO only recently started operating, this report will primarily focus on enforcement of the IPPC Directive and applicable sanctions under the WM.

1. Applicable sanctions

1.1. Introduction

In the Dutch legal system, both administrative and criminal measures can be taken when a breach of the legislation on industrial installations occurs. These two enforcement systems have different aims (respectively ensuring compliance and punishment). Consequently, offences may be determined as either being administrative and/or criminal in nature. Administrative measures are primarily enforced pursuant to WABO (Chapter 5 on enforcement) and the WM (Chapter 18 on enforcement). With regard to IPPC installations, all enforcement provisions fall under Chapter 5 WABO since October 2010 (Article 18.1a WM).

Besides the specific rules in the WABO and WM, the general rules of Dutch administrative law apply. The General Administrative Law Act (AWB) provides a comprehensive toolkit of enforcement measures to the competent authorities. It lists four types of administrative sanctions for offences that apply to both natural and legal persons (Article 5.1(3) AWB). It distinguishes between administrative coercion measures and administrative punitive sanctions; the latter are defined as administrative sanction intended to inflict harm on the violator (art. 5.2(1)(c) AWB).

Breaches of a number of provisions of the WABO, the WM and other acts have been qualified as criminal offence or crime (depending on the seriousness of the infringement) in the Law on Economic

[298] Directive 2008/1/EC of the European Parliament and of the Council of 15 February 2008, PB L24, 29.1.2008, pp. 8-29. On 7 January 2014, this Directive will be repealed by Directive 2010/75/EC, which provides for an integrated approach to prevention and control of emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention.
[299] Stb. 1979, 442 (Wet milieubeheer)
[300] Stb. 2008, 496 (Wet Algemene Bepalingen Omgevingsrecht).
[301] Stb. 2010, 143 (Besluit Omgevingsrecht)
[302] Stcrt. Nr 5162 (1 April 2010) (Ministeriële Regeling Omgevingsrecht)

Offences (WED),[303] by listing the relevant provisions. For instance, Articles 1 and 2 of the WABO requires that IPPC installations only commence operations after having obtained a permit from the competent authorities (i.e. municipality or province). Infringements to Articles 1 and 2 WABO are qualified as offences in the WED. The WED also established the maximum amount of a penalty for each offence. It is up to the Dutch judiciary to decide on the actual penalty. The maxima in the WED should be observed, but no minima apply. In addition, the Public Prosecutor's Office can offer a transaction to offenders, by which the payment of a fine is meant, in 'simple' minor cases. The transaction serves as a penalty and avoids the need to go to court. In practice, this offer is often accepted, meaning that only a minority of cases in which the Public Prosecutor is involved actually reach the courts. If a company does not agree with the penalty and refuses the transaction, the case may be brought to the criminal court in first instance. If the company is convicted, it may appeal that decision and – on matters of interpretation of the law – it may appeal to the High Court[304] for its view on the matter in cassation.

A report issued in January 2010 (Report on Environment Monitor Permitting, Control and Enforcement tasks, Rapportage Milieu Monitor Vergunningverlening, toezicht en handhaving (VHT)-taken) shows that there were some 616 IPPC installations for which provinces are the competent authority in the Netherlands in the year 2008 (not including those situated in the Province Noord-Holland and in Amsterdam). Inspections were carried out an average of 2,8 times per IPPC installation in 2008.

The following table shows statistics for the total number of installations for which the provinces are competent authority, for the year 2008. Statistics specific to IPPC installations are not available and these numbers and percentages relate both to IPPC and non-IPPC installations for which the provinces are the competent authority. Similar overviews for permits issued by municipal authorities were not identified.

Warnings were issued for 23 per cent of the installations (and 70 per cent of the violations). Thirteen per cent of these cases resulted in an administrative measure, which led to payment (in the sense that the payment actually had to be made because the company did not abide by the order) in 2,2 per cent of the cases. It was also noted that in 98 per cent of the cases, issuing a warning brought about that the perpetrators changed their behaviour and the breaches came to an end.

Table 1: Statistics on Inspections and Administrative Measures and Sanctions

Number of installations	Number of inspections	Number of offences identified	Number of warnings	Number of administrative measures	Number of payments made
Over 4,000 including 14% IPPC installations	9,318	1,426	994	169	32

From the IPPC inventory managed by Infomil, it follows that on 16 September 2009 a total of 2,743 IPPC installations existed in the Netherlands. Municipalities were the competent authority in most of the cases, namely for 2,149 installations. The provinces and the Environmental Protection Agency Rijnmond[305] were responsible for 599 installations, and a remaining category of four installations fell under the supervision of the State. Another overview undertaken at the same time showed almost the same result, namely a total of 2,752 installations, while differentiating between new and existing

[303] Wet economische delicten,
[304] Hoge Raad
[305] Dienst Centraal Milieubeheer Rijnmond is the regional environmental agency of the local and regional authorities operating in Rijnmond, the larger 'Port of Rotterdam'-area in the Netherlands.See http://www.dcmr.nl/en/index.html

installations and indicating which category of IPPC installation it concerned. The latter data were presented to the Commission as part of the obligations under Directive 2008/1.[306]

A representative of the Province of Zeeland noted that 48 IPPC installations were located in the Province in the year 2010. In the same year, the Province has issued some 24 formal warnings and 13 administrative orders subject to a financial payment. Ten of these orders concerned IPPC installations. In the vast majority of these cases, the orders had the desired effect and the violation was terminated by the company in question. In three cases, the companies had to make the financial payment as they did not abide by the order.

It is worth noting that after the serious accident at an installation that stores and manages chemicals in Moerdijk at the start of 2011, a quick scan was made of 416 installations that manage chemicals. Out of the 416 installations that were investigated, 71 scored badly on one of the five investigated aspects, 25 scored badly on two or more aspects, and only 13 scored reasonably well or well on all aspects. The Minister responsible for Environment informed the Parliament that he did not want to identify the companies scoring badly for the time being, but he did announce that if the situation would not improve before the summer of 2011 he would consider making a list of the 25 top perpetrators public and thus "naming and shaming" them.[307]

The following sections describe the available measures and sanctions.

1.2. Administrative order subject to a financial payment (last onder dwangsom)

The administrative order subject to a financial payment (in Dutch: 'dwangsom', which could be translated literally as 'coercive sum') is a remedial (reparation) sanction which aims at reversing the effects of the offence (Article 5.31d AWB). According to Article 5.32a AWB, the administrative order describes the remedial action to be taken. The administrative authority shall determine the payment either as a lump sum, or as a sum payable per unit of time in which the order has not been complied with or for each violation of the order (Article 5.32b(1) AWB). The amounts shall be reasonably proportionate to the gravity of the interest violated and to the intended effect of the penalty (Article 5.32b(3) AWB). This amount is established by the competent authority. In the province Zeeland, internal guidelines are used in order to establish the appropriate amount of the payments. Amongst other things, the profits from non-compliance with the legal obligations are taken into account, as are the frequency of violations, the type of violation and its nature (for instance, does it concern only one missing wall that is fire-resistant or does it concern a large number of containers that are not properly suited to store dangerous substances). The higher the payment that is requested, the better the reasons for imposing such a sum are to be as companies are inclined to go to court on this issue. Thus, with these guidelines in mind, each case is considered separately in order to define the amount that is reasonably necessary in order to ensure that the violation is remedied. The administrative order subject to a financial payment is considered to be an effective measure to ensure results. As already mentioned above, in 2010, the order was complied with ten times out of the 13 times such order was imposed on companies in Zeeland.

To ensure legal certainty for the permit holder, Article 5.23b(2) AWB requires the competent authority to indicate the maximum total amount of the penalty that can be imposed under the administrative order. An administrative authority may opt not to issue an order subject to a financial payment if this is incompatible with the interest which the rule violated aims to protect. (Article 5.32(2) AWB). This rule aims at ensuring that the measure of issuing an administrative order subject to a financial payment is not used instead of issuing an administrative coercive order (see below) in cases where the interests

[306] See p. 27 in the Report, available at http://circa.europa.eu/Public/irc/env/ippc_rev/library?l=/implementation_2006-2008/ms_factsheets&vm=detailed&sb=Title and at http://www.infomil.nl/onderwerpen/duurzame/bbt-ippc-brefs/rapportage-database/rapportage-2009/

[307] VROM Totaal 25 March 2011, Sancties dreigen voor onveilige chemiebedrijven, http://www.vromtotaal.nl/nieuws/2011/maart/sancties-dreigen-voor-onveilige-chemiebedrijven.8661.lynkx?tid=375&stid=0

of the environment would be harmed, for instance in cases of serious damage to the environment. In practice, the Dutch judiciary does not easily assume that an administrative order subject to a financial payment cannot be issued for this reason.[308]

1.3. Administrative coercive order (last onder bestuursdwang)

Administrative coercive measures are part of the instruments competent authorities have at their disposal against violations of the law. Article 5.21 of the AWB defines administrative coercive orders (in Dutch 'bestuursdwang') as a reparation measure which includes (a) the obligation to fully or partially repair damages caused by the offence, and (b) the competence of the competent authority to carry out the order itself if it is not carried out or not carried out in time by the operator. The municipality and province boards are authorized to use this measure pursuant to respectively Article 125 of the Municipalities Act and Article 122 of the Provinces Act. The administrative coercive order is used to bring the illegal situation back in line with the standards required by law, in other words to end the violation.

If the permit holder does not repair the damages or does not do so in time, the competent authority may carry out the order itself and use 'actual measures' in order to remedy the breach (for example by demolishing an illegal structure). Before doing so, the competent authority must send a written warning to the offender, informing him/her to remedy the breach within a specified time period. It the offender fails to do so, the competent authority may proceed to take the actual measures to remedy the illegal situation. The written notification is subject to appeal. The decision specifies which regulation and law is being violated (Article 5.24 AWB). The cost of performing the 'actual measure' (such as removal of the illegal structure) may be recovered from the offender (Article 5.25 AWB).

This administrative measure is far less popular than the administrative order subject to a financial payment. The interview with a representative of the Zeeland Province showed that the latter order is far easier to use for the administration in practice.

1.4. Administrative fine (*'bestuurlijke boete'*)

The administrative fine (in Dutch: '*bestuurlijke boete*') is a punitive sanction. This is in contrast to the other administrative measures described above which are not designed to punish a violation but to restore a situation which constitutes a breach of legal requirements, or to prevent their repetition. The administrative penalty does not necessitate that the competent authority sends a notification (warning) to the offender. Once a violation is detected (for example by inspectors), the competent authority can apply administrative fines immediately. The administrative fine is intended to tackle minor inconveniences caused in violation of general municipal ordinances (in Dutch: Algemene Plaatselijke Verordening, APV) such as littering.

This instrument was introduced only recently and thus, no data on initiated and finished procedures is available yet. Because of the scope of the instrument (notably its limitation to violations of general municipal ordinances), it is unlikely that it would be used for non-compliance with legislation on industrial emissions.

1.5. Revocation of the permit

If an offence is committed by the holder of a permit, the competent authority can fully or partially withdraw the permit. The law and regulations under which the permits are issued establish the rules concerning the revocation of the permit. Since 1 October 2010, the rules regarding revocation of IPPC permits are to be found in § 2.6 WABO when the revocation is a non-punitive measure, and in chapter 5 WABO where it is intended to be a punitive sanction. Article 2.33(1)(d) WABO requires the

[308] Van Buuren 2007, p. 268

competent authority to revoke a permit if the installation causes inacceptable environmental damage. Note that it is not merely a competence of the authorities to decide whether or not to revoke the permit in such cases, but a requirement for them to do so.[309] Before October 2010, the WM regulated this measure; there, the authorities were left with more discretion whether or not to revoke permits. In practice, the revocation of IPPC permits seems to be rare. It is rather used as a threat in some serious cases, like the chemicals company Thermphos (a phosphor producer which was exceeding its dioxin emission limits and committing other breaches of environmental regulation). The competent authority, the Province of Zeeland, threatened to revoke the permit but the company was very slow in adapting its practices to its permit conditions. The details of this case are provided in Annex IV. A recent report on this case claims that the authorities could have done more to ensure compliance.[310]

1.6. Criminal sanctions

When the public prosecutor decides to investigate a violation of environmental law and finds that the installation and/or the persons in charge are guilty of these violations, several options are available. The prosecutor can offer an out-of-court financial settlement (transaction) or bring the case to a court. The maximum amount that a fine for each particular category of offences can take is laid down in the Economic Offences Act (WED) *juncto* Article 23 of the Criminal Code. The Economic Offences Act also identifies the provisions in other acts like the WABO and WM, the breach of which constitutes an offence or a crime (depending on the seriousness of the infringement), and identifies the category of fines applicable to such violations.

[309] Kamerstukken II 2006/07, 30 844, nr. 3, p. 118
[310] Committee Mans 2011

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related administrative and criminal penalties in the Netherlands

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to apply for a permit for new or existing installations	Article 1.1(3) WABO requires that putting into operation, carrying substantial changes and operating an IPPC installation is subject to prior review. Obligations to apply for an environmental permit can be found in Article 2.1(e) WABO (and Article 2.1(2) BOR) ***Article 2.1(e) WABO*** A failure to comply with these requirements *may be considered* an offence (see introduction). ***Article 2.1 WABO***	Chapter 5 of WABO regulates administrative enforcement. According to Article 5.19 WABO, the authority that is competent to grant or provide exemption for a permit, can withdraw, fully or partially, the permit or exemption if: a. the permit or exemption was issued due to incorrect or incomplete information; b. non-compliance with permit or exemption; c. non-compliance with the regulations connected to the permit or exemption; d. the holder of the permit or exemption, does not respect general rules. On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanction (see introduction). ***Article 5.19 WABO and Article 5.1(3) AWB***	Article 1.1(3) WABO requires that putting into operation, carrying substantial changes and operating an IPPC installation is subject to prior review. In general, obligations to apply for an environmental permit can be found in Article 2.1(1)(e) WABO. A failure to comply with these requirements *may be considered* an offence (see introduction). Non-compliance with Article 2.1(1)(e) WABO is listed as an economic offence (*delict*). ***Article 2.1(1)(e) WABO, Article 2.1(2) BOR***	Article 6 WED establishes maximum fines/ years in prison. Article 6(1)(1) states *offences,* mentioned in Article 1(1) and/or 1a(1), and can be punished with one year imprisonment, community service or a fine of the fourth category, which can be up to Euros 19,000.[311] For other offences, the punishment can be imprisonment with a maximum of six months, community service or a fine of the fourth category, which can be up to Euros 19,000.[312] Article 6(1)(1) states that *crimes*, mentioned in Article 1(1) and/or 1a(1), are punished with maximum six years imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000. For other crimes, the punishment can be imprisonment with a maximum of two years, community service or a fine of the fourth category, which can be up to Euros 19,000. ***Article 6(1)(1) WED***

[311] As at 01-01-2010.
[312] As at 01-01-2010.

	Administrative		Criminal	
	Offences	**Penalties**	**Offences**	**Penalties**
Obligation to supply information for application for permits	In addition to Article 4.2 AWB, Article 4.4 BOR requires the applicant to provide the necessary information. ***Article 4.4 BOR*** *[Chapter 5 of WABO on enforcement sets sanction for non-compliance with implementing decrees eg BOR – see introduction]*	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5.1(3) AWB***	N/A	N/A
Obligation to notify the competent authority of any changes in the operation of an installation	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. ***Article 2.1(1)(e)(2) WABO***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5.1(3) AWB***	Article 2.1(1)(e)(2) requires a permit to change the installation or its operation. Acting contrary to the requirements for a permit (Article 2.1(e) WABO), the WED applies through Article 1a (1). ***Article 2.1(1)(e)(2) WABO***	Article 6 WED establishes the maximum fines/ years in prison (see obligation 1 above).
Obligation to comply with the conditions set in the permit or mandatory ELVs	Article 5.3 of the BOR requires that BAT apply to activities covered by Article 2.1(e) WABO. According to Article 5.4 BOR, the competent authority sets the BAT, including the nature, effects and volume of the emissions (5.4(1)(f) BOR). Article 5.5 BOR requires instructions on emissions limits for installations referred to in Article 2.1(1)(e) WABO. Annex I to the MOR lists BAT documents that are relevant for IPPC installations. A failure to comply with these requirements *may be considered* an offence (see introduction). ***Article 2.1(e) WABO, Article 5.5 BOR***	On the basis of Chapter 5, the competent authority (inspector) can apply administrative sanctions (see obligation 1 above and introduction). ***Article 5.19 WABO and Article 5.1(3) AWB***	Article 2.3 WABO requires that the permit holder acts in compliance with the conditions set out in the permit. Article 1a sub 1° WED makes it an economic offence not to do so.	Article 6 WED establishes the maximum fines/ years in prison (see obligation 1 above).

*ELVs: Emission Limit Value

2. Administrative procedure

2.1. General elements on the legal tradition and potential evolution

It was generally felt in the 1980's that criminal enforcement was not effective enough in tackling environmental problems caused by industry. Administrative enforcement was seen as better suited to deal with many cases in which companies were not complying with environmental law in the Netherlands.

It turned out that other issues also needed to be addressed, notably setting priorities[313] and tackling the situations in which breaches of environmental law are allowed to continue (in Dutch: *'gedogen'*, literally to tolerate, i.e. in exceptional cases not adopting enforcement measures against violations of environmental law by the authorities that are legally entitled to, and capable of, adopting such measures). Furthermore, a more integrated approach to enforcement was sought for, both in terms of the organization of enforcement as well as of the use of the available instruments. As for the organizational aspects of a more integrated approach towards enforcement, the cooperation between different authorities was and remains of concern.

A critical report by the committee Mans from 2008 (advising on the necessity of a revision of the environmental law enforcement system) showed that enforcement in the Netherlands needed major improvements.[314] The Dutch central government accepted that there was a need for improved cooperation between competent authorities, notably municipalities, provinces, public prosecutors and the police. In June 2009, the organizations representing municipalities (VNG) and provinces (IPO) agreed with the central government that regional executive bodies ('*regionale uitvoeringsdiensten*', rud's) responsible for issuing environmental permits, control and enforcement, would be created and start their operations as of 1 January 2012. It recently became apparent that progress is slow and meeting the deadline unlikely. The responsible ministers demanded in a letter to the provinces to achieve interim results by the summer of 2011.[315]

An example of the present organisation of enforcement in one of the Dutch provinces is presented in box 1 below.

Box 1: Enforcement of environmental law in the province of Zeeland [316]

In the 2007 enforcement memorandum *'Oog op Zeeland'* the province of Zeeland elaborates on its enforcement strategy. The main objective was to better prevent infringements, and limit their consequences. Awareness-raising amongst citizens and industry is considered as a key instrument. The memorandum noted supervision to establish infringements in an early stage as the essence of enforcement. Permit holders who abide by the rules, will be inspected less frequently than those who did not do so in the past. Several sanctioning actions can be taken when an infringement is established:

- Applying administrative coercive measures : the Province intervenes to end a certain behavior
- Issuing an administrative order : the Province forces the perpetrator to end a certain behavior before a certain time limit
- Revocation of the permit which prohibits the activities of the perpetrator from that moment on.

[313] Algemene Rekenkamer, Handhaven en gedogen, rapport, in: TK 2004-2005, 30 050, nr. 2.
[314] Committee Mans (2008), Commissie Herziening Handhavingsstelsel VROM-Regelgeving, *De tijd is rijp*, The Hague, July 2008. Note that this report is not to be confused with the 2011 report of the Committee Mans on the company Thermphos, written under the leadership of the same Mr. Mans.
[315] http://www.binnenlandsbestuur.nl/Home/all/atsma-dreigt-in-te-grijpen-bij-omgevingsdiensten.784293.lynkx
[316] Provincie Zeeland, *Oog op Zeeland: Nota handhaving natuur en milieu*, Directie Ruimte, Milieu en Water, 20 February 2007.

In deciding the course of action, the administrative authority will take into account: whether a follow-up inspection is possible; how long the infringement lasted; the level of urgency of the action; whether it concerns a 'core provision' (see Section 3.2); and whether the perpetrator is generally known as 'abiding by the rules'.

In extraordinary situations, the administrative authorities can opt to tolerate certain cases of infringement, but only 'actively', meaning that the authorities need to issue a written statement, usually accompanied with conditions, allowing a certain behavior.

Besides administrative actions, criminal procedures are at the disposal of the competent authorities. In order to discourage particular dangerous types of behavior, the Public Prosecution (OM) can, in agreement with the administrative authorities, start criminal procedures. Usually an out of court financial settlement (transaction) is imposed (see Section 3.2.2).

2.2. Inspections

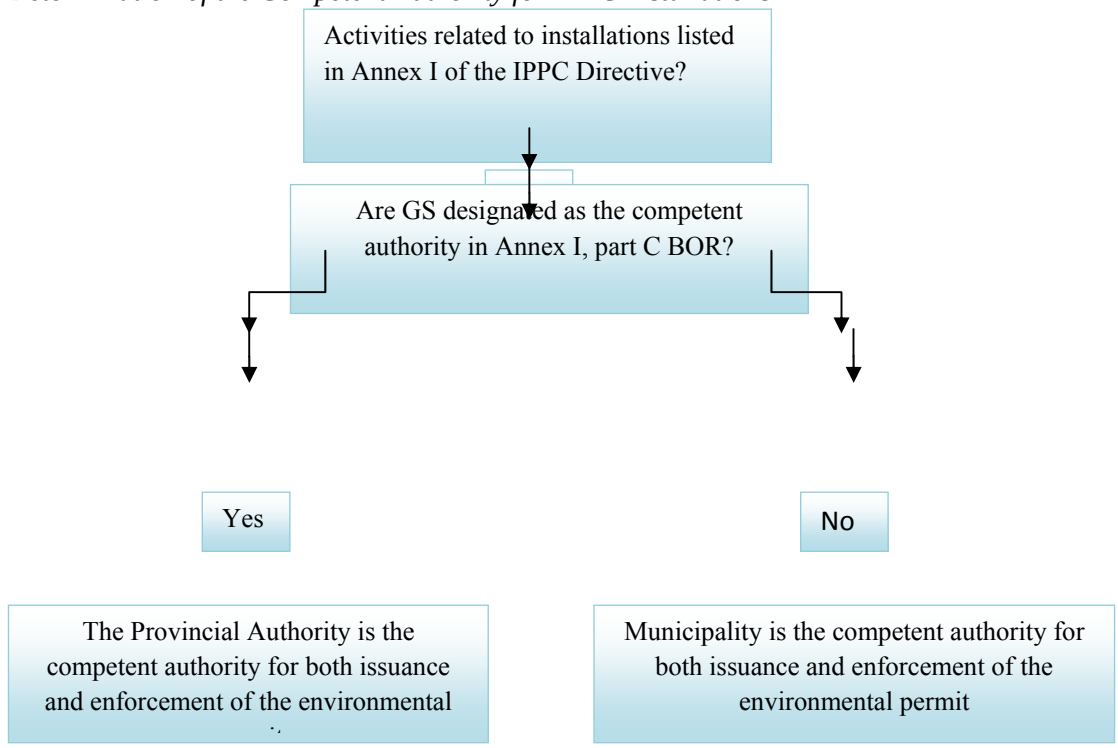
2.2.1. General information

As defined in the WM (chapter 8) and WABO (chapter 5), the competent authority is a body responsible for taking a decision in relation to a request for an environmental permit, as well as in relation to the enforcement and inspections relating to permits that are already granted. In case of non-compliance with the requirements set out in the legislation, these competent authorities can make use of their administrative enforcement powers described above. To be more exact, the provincial and municipal executive authorities designate officials charged with the implementation of the environmental legislation; these officials are also in charge of monitoring compliance with the provisions laid down by or pursuant to the Act concerned within their jurisdiction. These officials are a part of the environmental agencies (milieudiensten).

The activities for which the provincial authorities (in Dutch: Gedeputeerde Staten) rather than municipalities are the designated competent authority are listed in Annex I, part C BOR. The following figure explains how to establish the competent authority for IPPC installations:[317]

[317] Information retrieved from http://www.infomil.nl/algemene-onderdelen/uitgebreid-zoeken/@113407/inleiding/?PrvBslItmIdt=112833, 28 March 2011.

Figure 1: Determination of the Competent Authority for IPPC installations



Examples of installations for which the provinces are competent authority are installations processing 5 million kg per year or more of phosphor, ammoniac, chlorine or other dangerous substances mentioned, and steel processing plants. Consequently, installations with smaller capacities will fall under the competence of the municipalities. When provincial or municipal authorities are designated as the competent authority, they assume this role for the issuance and enforcement of the entire environmental permit (through the environmental agencies, see above).[318]

The Province is responsible for monitoring whether rules are abided by and, where necessary where violations are discovered, for enforcement. Enforcement is a discretionary competence. The decision whether to enforce or not needs to be reached by a proportionate balancing of interests. The interest of enforcement forms one of the issues to weigh, albeit in principle an important one. Furthermore, the interests of the company violating the norm and of third parties play a role. From Dutch jurisprudence it follows that normally, enforcement action needs to be taken when violations occur. In other words, there is a principle duty to enforce. Only in special circumstances authorities may decide to not enforce. Such circumstances can include the fact that the violation will end within a foreseeable period of time, or when legalisation in the form of new permit conditions is imminent. In such cases enforcement does not serve a reasonable purpose. These special circumstances occur regularly in Dutch legal practice. According to the committee Mans,[319] the authorities always need to check whether legalisation is possible. Also, enforcement is not to take place when this would be disproportionate. For instance, a violation of a minor nature and/or interests of third parties have not been violated in a manner that is worth mentioning, no action will be taken.

Another actor is the '*VROM-inspectie*', an inter-administration supervising agency that oversees the manner in which the competent authorities implement their permitting and enforcement competences. Since 1 January 2009, the '*VROM-inspectie*'has been assigned an additional task in the programme Priority companies (Prioritaire bedrijven), namely overseeing the functioning of competent authorities

[318] As an aid in determining which authority is competent, a website provides information and an electronic aid system. See http://www.infomil.nl/algemene-onderdelen/uitgebreid-zoeken/@113407/inleiding/?PrvBslItmIdt=112833 .
[319] Committee Mans 2011

in respect of major companies, notably the approximately 800 large IPPC companies. Within these companies, the '*VROM-inspectie*'prioritizes the major air emissions and largest safety hazards, bringing the total down to some 400 companies. The '*VROM-inspectie*' can request the competent authorities to take enforcement action, and as an ultimate remedy it can do so itself instead of the competent authorities if the Council of State agrees to this drastic step. The '*VROM-inspectie*'does not have the competence to directly intervene in the functioning of a company, however.

In 2008, the Dutch provinces (not including Noord Holland and Amsterdam) spend 402,946 hours on enforcement, which equals to 268 full time equivalent (fte).[320] If the figures are extrapolated for the two missing entities, the total amount of fte in all Dutch provinces in 2008 amounted to some 320 fte. The costs of enforcement were Euros 33 million.[321] As for the province of Zeeland, the interview suggested that in 2010 some 150 inspections took place, 50 of which (exceptionally) concerned Thermphos. Compared to other regions in the South of the Netherlands with which there is a cooperation that is to be intensified further, notably in anticipation of the new structure for permitting and enforcement (the 'RUD's'), Zeeland was carrying out more inspections per installation.

Part 5.2 AWB deals with to the control of compliance with administrative law. When an administrative authority has been designated as the competent authority, it acquires the powers enshrined in this part of the AWB and, possibly, extra prerogatives laid down in special legislation.[322] Some key elements of the competences of inspectors, laid down in Part 5.2 AWB are, amongst others:

- Article 5.13 AWB: An inspector only uses his power for the fulfilment of his duties;
- Article 5.15 AWB: An inspector can enter all premises, except for a residence without permission of the inhabitant;
- Article 5.16 AWB: An inspector can force cooperation in acquiring information;
- Article 5.17 AWB: The inspector can force access to documents and financial statements;
- Article 5.20 AWB: Everyone is obliged to cooperate with the inspector in the execution of his duties within a reasonable term.

Article 5.11 WABO declares the articles mentioned applicable to the enforcement of the WABO by the competent authority.

2.2.2. Inspection Strategies

Inspections are intended to enforce compliance with the law. Setting priorities is essential, whereas it is impossible to verify compliance in its totality. Therefore, the competent authorities need to draw up inspection strategies which can be altered annually, depending on the focus of the authority. As a starting point, periodical inspections should be held. Based on findings herein, other types of inspections e.g. audits or in-depth inspections could be carried out.

The competent authorities can design their own inspection strategies. Table 3 provides an overview of several types of inspections, and when these are used in the Dutch province Noord-Brabant.

Table 3: Inspection strategy of the province of North-Brabant[323]

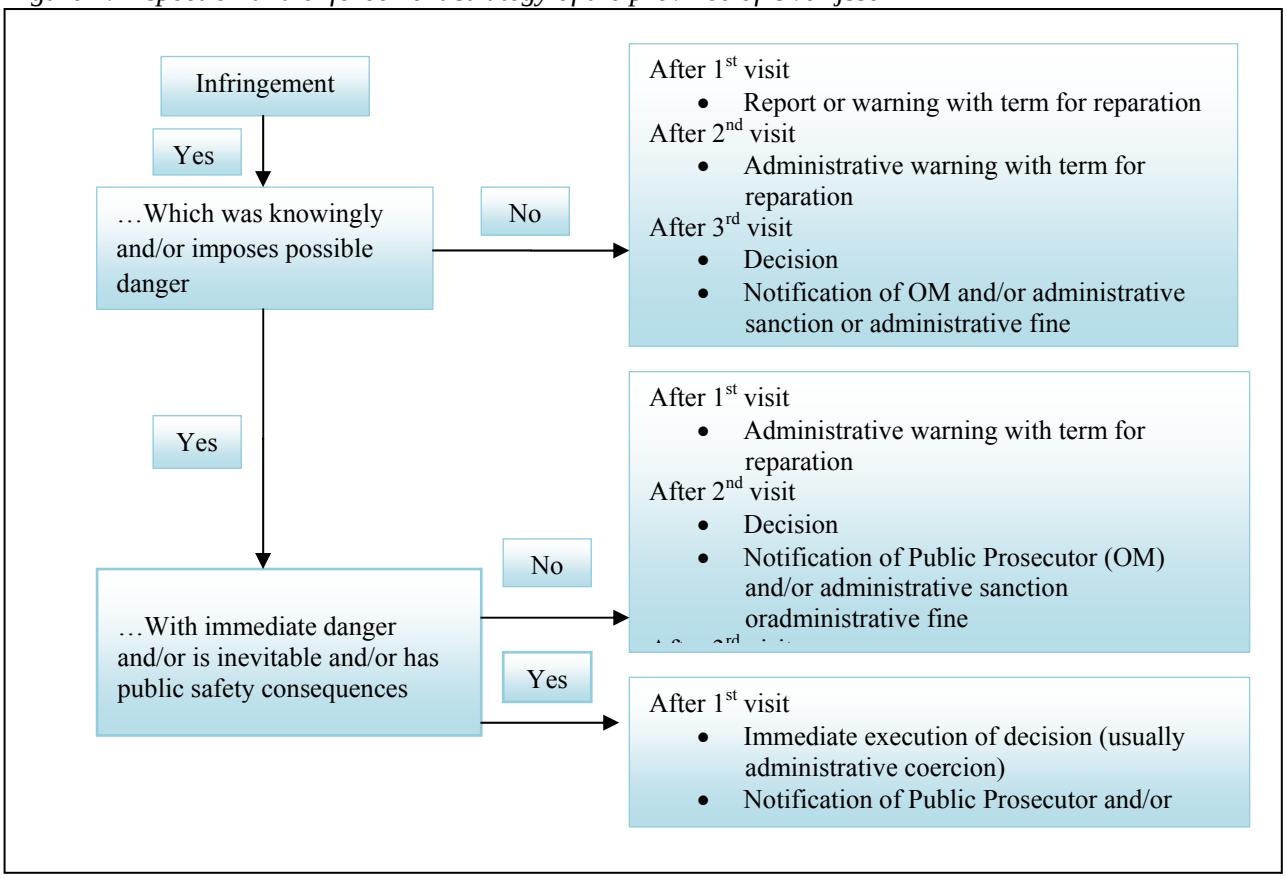
Type of inspection	Risk involved
Periodical inspection	High, medium, low
Quick scan, industry specific inspection	Medium, low

[320] 1 fte amounting to 1,500 working hours
[321] Kplusv, *Rapportage Milieu Monitor Vergunningverlening, toezicht en handhaving (VHT)-taken*, p. 28.
[322] Teunissen, J.M.H.F., *Handboek Milieurecht*, Chapter 8: Handhaving en maatregelen in bijzondere omstandigheden, Berghauser Pont Publishing, 3rd edition, 2010.
[323] *Zo handhaven we in Brabant*, actualisering handhavingsstrategie 2010's Hertogenbosch – Groningen, September 2010, pp. 7-8.

Chain oversight,[324] in depth inspections and inspections of records	High
Verification, audits	Generally supportive
Incidental inspections after complaints have been received or calamities	High, medium, low

The enforcement strategies of several provinces all indicate that perpetrators who commit infringements more than once can expect more visits from the inspecting authorities. A permit holder, who generally complies with the permit, needs less oversight than notorious infringers.[325] Thermphos with 50 inspections in 2010 forms a case in point here.

Figure 2. Inspection and enforcement strategy of the province of Overijssel[326]



Both an administrative order subject to a financial payment (dwangsom) and an administrative coercive order ('*bestuursdwang*') constitute decisions that can be asked to be reconsidered. Requesting reconsideration is a procedural pre-condition to further legal steps (Article 6.13 AWB) which can be taken when this reconsideration is without success for the applicant. First the administrative judges at the district court ('*rechtbank*') can be asked to annul the decision and finally an appeal is possible at the Council of State (Article 6.4 AWB).

Where administrative orders subject to a financial payment are concerned, Article 5.34(1) of the AWB regulates that the operator can request for the annulment of the order, the temporary suspension of the period within which the action needs to be taken, the reducing of the amount of payments in case of impossibility for the operator to meet the demands of the order. At the request of the operator, the administrative body that imposed the order can annul it if the order has been in force for over a year

[324] Inspections focussed on installations in the highest risk category, which monitor a certain product or a certain type of waste throughout the entire production process. The results can be used for future decisions on focus of the inspections. Usually multiple authorities are competent, so external coordination is necessary. Definition retrieved from the Enforcement Strategy of the Region Haaglanden (The Hague and surroundings), November 2004.
[325] See for example 'Oog op Zeeland', enforcement document of the province of Zeeland.
[326] Ferwerda, C., *Handhaven of gedogen, dat is de vraag*, Handhaving 2010, no. 4.

but the payment was not done within that period (Article 5.34(2) AWB). The actual payment needs to be decided upon via a separate decision (Article 5.37 AWB). A request for reconsidering and appeal covers both the latter decision as well as the general one (Article 5.39 AWB). Similar rules apply for the administrative enforcement order (bestuursdwang). In this instance, the fact that the request for reconsidering and the appeal are covering both decisions is laid down in Article 5.31c AWB.

3. Criminal procedures

3.1. General information

In the Netherlands, the '*Openbaar Ministerie*' (OM), or Public Prosecution Service, has sole discretion in deciding whether or not to bring criminal proceedings against legal or natural persons suspected of committing infringements of the law. In doing so, the OM can make use of the "opportunity principle". This means that the OM can refrain from prosecution if it deems criminal procedures not 'opportune' with regard to the general interest.[327] With the help of the Instruction on enforcement of environmental law, the Public Prosecution Service sets out in detail which issues are to be taken into account when deciding on prosecuting or not, and when prosecution is called for, which elements are to be taken into account. This section describes and the criminal procedure as applied to cases involving IPPC installations, including the considerations taken into account by the OM with regard to initiating prosecution in environmental cases.

3.2. Criminal procedures and environmental cases

The OM has the task of dealing with criminal aspects of environmental law enforcement procedures in cooperation with the administrative and investigative authorities. According to the 'Instruction on enforcement of environmental law', the two main aspects herein are:

A) Endorsing norms established to protect:
   - The environment or the public health;
   - Credibility (trustworthiness) of the norm-setting government;
   - Fair competition markets, especially when the infringement results in clear competitive advantage, or;
   - The possibility of government control.

B) Limitation of damage and restoration of urgent damage, notably where administrative authorities cannot act.[328]

In the light of these purposes, the OM deems initiating criminal proceedings appropriate only in case of infringement of 'core provisions' (kernbepalingen) of specific environmental provisions, in principle. These are the provisions which are the essence of the interests the regulation aims at protecting. With regard to IPPC installations, the most important core provisions are article 1.1(3) WABO (ex article 8.1 WM), setting the obligation to apply for a permit; article 5.19 WABO (ex. Chapter 8 WM in general), concerning compliance with the permits issued under the WABO.

3.3. Criminal procedures in the investigative phase

When infringement of a core provision has been established, an official report (proces-verbaal, a written report on what has been observed by a government official) will be communicated to the (legal or natural) person who allegedly infringed environmental law, unless the public prosecutor (Officier van Justitie) deems that the infringement was:

[327] Information available at: www.om.nl.
[328] Openbaar Ministerie, Strategiedocument, Aanwijzing handhaving milieurecht, Den Haag, 2010. , (2010A004). Published in Official Gazette (Staatscourant) 2010, nr. 2953.

- Unintentional, and;
- Incidental, and;
- Had only minor consequences, and;
- The person *in casu* took adequate action to cease the infringement and prevented any further damages (note that the above form cumulative conditions);

Or when,

- Considering an incidental or structural agreement between the OM and the administrative authorities, there is no role for criminal proceedings, whereas the administrative measure(s) to restore previous conditions is considered as a sufficient 'sanction'.

In case of an infringement of a non-core provision, initiating criminal procedures is in general not deemed opportune, unless there are, from a criminal perspective, relevant circumstances. These are, amongst others: a direct and significant threat of the environment, public health or government credibility; damage to the functioning of the market; a threat of increase in scale of infringement when no action is taken.[329]

3.4. Criminal procedures in the prosecution phase

A distinction is made between simple and more complicated cases. Simple cases are defined as environmental cases often occurring that are relatively simple by nature or constitutes only a minor violation of the interests that are to be protected. It is estimated that simple cases represent two third of the environmental cases.

Simple cases

In a simple case, an out-of-court financial settlement (transaction) may be reached between the OM and the perpetrator. Taking into account extraordinary circumstances enables the OM to adjust the settlement to the specific situation of the perpetrator. When the perpetrator has a history of multiple infringements, settlement might not be the suitable course of action.

In the majority of cases, reaffirming the law and discouraging certain behaviour will be the main target of the OM. Adequate decision making is important to attain these goals. Therefore, the OM will inform the perpetrator as soon as possible, but within three months at the latest, about its decision concerning the prosecution.

Other public bodies are also entitled to offer such settlements. Based on Article 37 of the Economic Offences Act ('*Wet op de Economische Delicten*',WED), these bodies, which include certain provincial and communal public bodies and certain civil servants, are allowed to use their competence within the limits set by the Ministry of Justice in the Decree on Transactions for environmental offences ('*Transactiebesluit milieudelicten*').

Complicated cases

The OM strives to reach a decision concerning prosecution in more complicated cases within six months after submission of the notice ('*proces-verbaal*'). The decision involves a proposal for a settlement, or a subpoena. Typically, the OM will take into account the role which natural persons played during the infringement, and whether prosecuting them instead of the legal person is of added value with regard to future prevention. Furthermore, the following considerations have to be taken into account by the OM:

[329] Aanwijzing handhaving milieurecht (2010A004), available at www.om.nl.

- If the behaviour was intended or executed in bad faith, the decision should focus on discouragement, punishment and limiting the possibilities to continue the behaviour;
- The more 'history' the perpetrator has with the OM, the more focus should be on punishment;
- In case of damage to the environment, the OM should consider if, and how, criminal sanctions should be imposed aimed at restoration of the environment. In order to determine this, communication with the administrative authorities is important;
- The OM could decide to prosecute in the public interest, to give a signal to the industry.[330]

3.5. Possibilities of appeal

The OM, taking into account the considerations mentioned above, can thus come to the conclusion that prosecution is the right course of action. Article 38 WED confers the power to hear economic crime cases in first instance to courts only, and more specifically to economic chambers within a court. Against a judgment, containing a verdict related to a crime, appeal can be lodged at a court of appeal (Gerechtshof)[331] by both the public prosecutor and the suspect who has not been completely acquitted of the indictment.[332] For minor infringements other rules apply,[333] but considering the enforcement strategy of the OM, only major environmental crimes would be prosecuted, which renders these rules irrelevant for present purposes. The appeal should be filed within 14 days after the judgment was delivered.[334]

Article 427 SV ('*Wetboek van Strafvordering*') provides for the possibility of cassation (cassatie) at the Dutch Supreme Court (Hoge Raad) against judgments of courts of appeal within 14 days after the delivery of the judgment in appeal.[335]

4. Synergies between administrative and criminal procedures

Administrative and criminal enforcement are two separate systems with different functions each. However, effective enforcement of environmental law is only possible with an integrated approach. Starting point should be that administrative action and criminal action, each keeping in mind its own purpose independently as well as combined, should aimed at ensuring a certain level of adherence and at limiting the consequences of possible infringements.

Relatively few environmental cases end up before a criminal court. However, if the OM deems criminal prosecution appropriate for certain environmental infringements, it needs to communicate these to the administrative authorities. These authorities will have in turn to inform the OM if such an infringement has taken place. Permanent communication between criminal and administrative authorities and a pro-active attitude of both is thus required. Furthermore, whereas the OM does usually not have the in-house environmental expertise necessary to bring a case before a criminal court, communication with the administrative enforcement authority becomes even more important.

The manner in which the authorities responsible for criminal and for administrative enforcement need to coordinate their respective actions within their competences has not been regulated. In practice, the coordination between the Public Prosecutor's Office and Administrative authorities is considered as needing improvement, as for instance is explained in the report of the Committee Mans from 2008 discussed above. In Zeeland, in spite of a longstanding discussion on the need for structural coordination, ad hoc coordination remains the manner in which in individual cases issues of

[330] Aanwijzing handhaving milieurecht (2010A004), available at www.om.nl.
[331] Article 52 WED.
[332] Article 404(1) Wetboek van Strafvordering (Sv).
[333] Article 404(2) Sv.
[334] Article 408(1) Sv.
[335] Article 432(1) Sv.

administrative and/or penal measures with regard to a company are dealt with. In Groningen, regular coordination meetings do take place between the Public Prosecutors Office and the administration.[336]

5. Conclusions

Proportionality

As outlined in this report, a wide range of measures is at the disposal of the competent authorities to ensure compliance with the relevant provisions that transpose the IPPC Directive in the Netherlands. In practice, however, the administrative measures usually consist of orders subject to a financial payment and criminal measures remain the exception. Complementing guiding documents and legal provisions ensure the proportionality of the administrative and criminal measures imposed in case of non-compliance, based on the nature and gravity of the infringement.

Where criminal procedures are concerned, the guidance document (Instruction on enforcement of environmental law) stresses that in principle, these will only be initiated in case of a breach of 'core provisions' of environmental legislation, except when the behaviour was according to the Public Prosecutor a) unintended and incidental and did not have major environmental consequences; and ceased immediately after adequate action of the operator (cumulative conditions) or b) if criminal law has no function in the case at hand because *de facto* the administrative measure(s) already constitute a sufficient 'punishment', in light of *ad hoc* or structural agreements between the Public Prosecutors Office and the administration. In principle, where non-core provisions were violated, no prosecution is to take place, except in cases when the Public Prosecutor finds that special circumstances prevail (for instance relating to a direct substantial threat to the environment or public health) that makes it necessary to prosecute.

Another example of integrating elements of proportionality into the criminal enforcement procedures related to the IPPC Directive is the division of the level of fines into six categories, being a maximum of: first category, Euros 380; second category, Euros 3,800; third category, Euros 7,600; fourth category Euros 19,000; fifth category, Euros 76,000; sixth category, Euros 760,000.[337] The maximum amount of these fines is subject to revision every two years and is adapted to the development of the consumer price index; the next revision is scheduled for 1 January 2012.[338]

Article 2.3 WABO requires that the permit holder acts in compliance with the conditions set out in the permit. Article 1a sub 1° WED makes it an economic offence not to do so. Article 6(1)(1) WED states that crimes, mentioned in Article 1(1) and/or 1a(1) WED, are punished with six years imprisonment, community service or a fine of the fifth category (Euros 76,000). The Dutch criminal code furthermore provides for the possibility to raise the fine by one category if the case concerns legal entities, and the actual applicable category of fines does not provide for adequate punishment.[339] The administrative enforcement procedures also provide for opportunities to adapt enforcement action to the nature and gravity of the infringement. For example, Article 5.32b(2) AWB states that the level of a fine 'shall be reasonably proportionate to the gravity of the interest violated and to the intended effect of the penalty'.

Effectiveness

While this study shows that both the order with a financial payment (*'dwangsom'*) and criminal sanctions can be effective in achieving results, the examples investigated reveal that improvements are

[336] Information provided by public prosecutor Steven Pieters in a meeting on 8 June 2011.
[337] Article 23(4) Sr.
[338] Article 23(9) Sr.
[339] Article 23(7) Sr.

still necessary. The same conclusions were also drawn in the critical report of the Committee Mans on the effectiveness of Dutch enforcement of environmental law[340] issued in 2008. That report claimed that although improvements were visible on both the State and the decentralized levels, the initiatives undertaken to improve effectiveness were still unsatisfactory. Especially the decentralization and integration of tasks and competences of administrative bodies on the one hand, and the ongoing Europeanization and internationalisation on the other hand caused problems.[341] The Dutch structure was deemed too fragmented, which subsequently resulted in inefficient enforcement of environmental law.342 The solution was sought in a restructuring of the institutional enforcement system, by creating regional enforcements services, which in the future will deal with the major part of environmental law in a certain region. The plans of the government implement the majority of the recommendations of the Report. The *'Regionale Uitvoeringsdiensten'* (RUDs) are expected to become operative in the coming years.

It is worth mentioning another Dutch study as well in this respect. Struiksma, De Ridder and Winter 2006 investigated effectiveness of environmental enforcement in the Netherlands. Protection of the environment is the ultimate (more difficult to measure) goal of enforcement of environmental provisions, but intermediate goals (easier to measure) can also be distinguished like prevention (general and specific), termination of the offence, restoration of the harmful effects, the promotion of compliance after an offence, compensation for damage done and punishment of the offender. The degree to which the environment benefits from enforcement is important but hard or impossible to answer in individual cases. Hence the research concentrated on four measurable intermediate:

- Is the offence terminated?
- Are the harmful effects of the offence restored?
- Was the offence repeated e.g. did the Prosecutors Office or the administrative authorities took further enforcement measures?
- Can the change in the behaviour of the offender be determined (compliance)?

Fifty eight cases were studied in which enforcement was conducted in three different modes: criminal prosecution (11), administrative sanctioning (12) and through a mix of both type of instruments (35). The selected cases vary in several ways (complexity, competent authorities, provisions concerned, domains of environmental protection – ranging from storage of firework and other dangerous materials, pollution to agriculture). In all selected cases the offence was – when possible – terminated. The offender behaves in accordance with the standards. In this respect environmental enforcement is effective. The other standards for effective enforcement were not fully reached. In eighteen out of eighty five (31%) cases sanctioning is not (entirely) effective. Criminal prosecution is effective in ten out of eleven cases; administrative sanctioning is effective in eight out of fourteen cases and the combination of the two enforcement instruments is effective in twenty two out of thirty three cases. This was seen as an indication that criminal enforcement succeeds in reaching a relatively high score on effectiveness. The researchers stressed that this does not mean that criminal enforcement is systematically more effective than administrative enforcement. Situations in practice always contain combinations of several features. For the choice of a certain instrument to be effective, a careful and thorough judgement of all the features is necessary. This leads to a decision-making model that reflects the assumptions that can be made in this respect. The model can be seen as a hypothesis on the effectiveness of criminal law and administrative law in the enforcement of environmental law. In two third of the cases the expected enforcement instruments were used. The most common deviations from the model are that only administrative sanctioning has taken place, while the model indicated the choice of a mix. In half of these cases the offence was repeated. The administrative authority only succeeds in a temporary change in the offender's behaviour; criminal prosecution could have prevented recurrence of the offence. However, criminal prosecution is not always effective due to low

[340] 'De Tijd is Rijp', Commissie Herziening Handhavingsstelsel VROM-regelgeving, Den Haag, July 2008, hereafter, Report.
[341] Report, p. 5.
[342] Report, p. 8.

penalties with low or zero preventive effect, and to the long interval of time between the moment the offence was committed and the conviction. In addition, the deficient implementation of enforcement by administrative authorities plays a role. Another factor is the lack of cooperation between the Public Prosecutors agency and administrative authorities (in only three out of the total of 58 cases, they coordinated their policies; in all other cases, no joint policy was developed, and sometimes information was not even shared). The researchers concluded that administrative measures seem to have a lower preventive effect than criminal law measures. Besides, criminal law would probably be more effective if higher fines were imposed.

Table 4 summarises the results of the study.[343]

Table 4: Results of the study on effectiveness of environmental enforcement

	Criminal prosecution	Administrative sanctioning	Mix of criminal prosecution / adm. sanctioning	Total
Effective	10 = 91%	8 = 57%	22 = 67%	40 = 69%
Partly effective		3 = 21%	1 = 3%	4 = 7%
Not effective	1 = 8%	3 = 21%	10 = 30%	14 = 24%
Total	**11**	**14**	**33**	**58**

The interview with the Province of Zeeland civil servant revealed that, by 2010, the Province issued about 24 formal warnings and 13 administrative orders subject to a financial payment. Ten of these orders concerned IPPC installations. In the vast majority of these cases, the orders had the desired effect and the violation was terminated by the company in question. In three cases, the financial payment was effectuated because the company did not abide by the order. The interviewed person concluded that the effectiveness of administrative interventions was quite satisfactory.

Dissuasiveness

The administrative order subject to a financial payment (Article 5.31d AWB) can be considered an effective tool to dissuade operators of installations from continuing their behaviour. According to Article 5.32a AWB, the administrative order describes the remedial action to be taken for the order to be lifted. The administrative authority shall determine the payment either as a lump sum, or as a sum payable per unit of time in which the order has not been complied with or for each violation of the order (Article 5.32b(1) AWB). The amount can (and must) be proportionate to the gravity of the interest violated and to the intended effect of the penalty (Article 5.32b (3) AWB), ensuring its dissuasiveness (and proportionality and effectiveness).

As concluded in an earlier stage, in the Netherlands criminal sanctions are generally used for punitive purposes instead of enforcing compliance. However, it is likely that criminal sanctions do have dissuasive effects on future behaviour of operators.

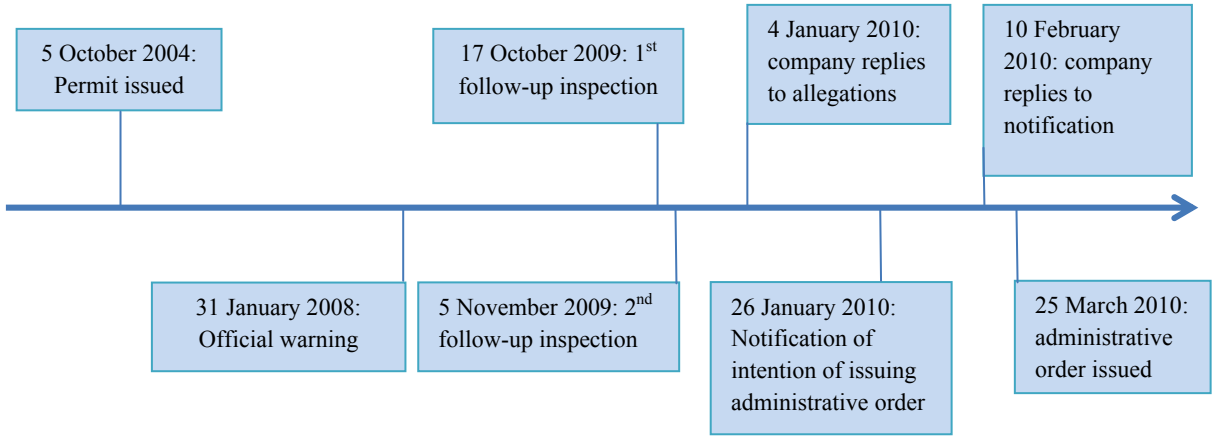
[343] Source : table 7.2 at p. 58 of Struiksma, De Ridder and Winter 2006.

Case Studies

Case study 1: waste management company in the Province Zeeland

Interviewee and provider of documentation: G.A. Gabriëlse
Function: Coordinator cluster Industry and Measurements, Department Enforcement Nature and Environment of the Directorate Spatial Planning, Environment and Water, Province of Zeeland
Date of interview: 7 June 2011

Timeline of the procedure



Background

This case concerns an industrial waste management firm located in the Province of Zeeland, operating under a permit issued in 2004. On 31 January 2008, two inspectors of the Environmental Enforcement Department of the Province of Zeeland established an infringement of, amongst others, provision 4.7(b) of the permit in which it is specified that volatile liquid substances are not to be mixed with each other. It appeared that the firm had repeatedly mixed volatile liquid substances, although this is prohibited by the quoted permit condition.

Applicable legislation

A violation of an environmental permit issued under the Environmental Management Act constitutes a violation of Article 2.3 WABO. Article 2.3 WABO requires that the permit holder acts in compliance with the conditions set out in the permit. Various administrative measures can be taken in case of infringement (administrative order subject to financial payment, coercive order, revocation of the permit). In addition, breach of Article 2.3 WABO is qualified as an economic offence under Article 1a sub 1° WED and, as such, subject to fines or imprisonment, namely a maximum of one year imprisonment, community service or a fine of the fourth category (up to Euros 19,000) or, if it is qualified as a crime, a maximum of six years imprisonment, community service or a fine of the fifth category, which can be up to Euros 76,000.

Procedure

After the establishment of the infringements, an official warning was issued. The warning notified the firm that an administrative order subject to a financial payment might be issued if it appears that after eventual follow-up inspections the infringements has not ceased. In October 2009, the inspectors

concluded that the infringing behaviour was still ongoing. A second inspection in November 2009 resulted in a similar conclusion.

The company responded to the findings of the inspectors in a letter to the Provincial Authorities. However, the Authorities did not see any reason to refrain from taking administrative enforcement measures based on this letter. Subsequently, a notification of the intention to issue an administrative order subject to a financial payment was communicated to the company on 26 January 2010. Again, the company sent a reply, and again, no arguments in favour of refraining from enforcement action were found. To substantiate their decision, the Provincial Authorities stressed the repetitive character of the infringements. Finally, the administrative order subject to a financial payment was issued on 25 March 2010.

The amount of the financial payment was set at Euros 5,000 - per infringement with a maximum of Euros 50,000. For any case in which a violation is to be found occurring after that week, a sum of Euros 5,000 was to be paid.

Effectiveness, proportionality and dissuasiveness

It is unclear whether the company had enjoyed financial benefits resulting from the infringing behaviour or not. Therefore, this aspect could not be calculated with certainty when setting the amount of financial payment attached to the order. The term of one week was deemed a reasonable period to restore compliance with the permit (i.e. sufficient to ensure that no more violations will occur after that week).

The company complied with the order and no financial payments were made as a result. It could be concluded that, considering the fact that the company did not agree with the findings of the inspectors throughout the procedure, the prospect of a fine dissuaded the company from further infringement of the permit.

Case study 2: An example of successful criminal sanctions imposed on an IPPC installation: Corus Staal B.V.

Note: no interview could be carried out for this case, therefore it was not possible to obtain sufficient details to follow the case study format.

Corus Staal B.V. is a producer of steel located in IJmuiden. Since 2007 it is part of Tata Steel, one of the world's largest producers of steel.[344] To be able to operate its plant, the company held several environmental permits issued under the 'Wet Milieubeheer' (Environmental Management Act) and the 'Wet verontreiniging oppervlaktewateren' (Pollution of Surface Waters Act). It forms an IPPC installation. Based primarily on inspections and written police reports, the company was accused of violating its permits on several counts in the period of June 2003 to June 2005. Amongst others, Corus Staal B.V. was accused of, intentionally or not, violating provisions on: [count 1] discharging wastewater with a certain concentration of iron; [count 3] discharging sewer cleaning waste in surface waters; [count 4] discharging oil-polluted wastewater in unprotected soil; [count 6] discharging acidic water in or on the soil; [count 8] having unquenched chalk present on the floor of the permitted installation; [count 9] loading a truck with substances in such a manner that visual diffusion took place; [count 11] having large quantities of a certain raw material necessary for the production of 'raw iron' present near the permitted installation; [counts 2, 5, 7] reporting these incidents as soon as possible to the competent authority.

[344] http://www.tatasteel.nl/profiel/historie1.html.

The case was decided by the Penal chamber of the District Court Haarlem in the Netherlands on 23 April 2009 (Case 15/098026-4, LJN BI2184). The judge started with asserting that, according to then applicable Dutch procedural law, for counts of minor offences to be admissible before a court of law, prosecution should be initiated within two years after the infringement took place. In the present case, this meant that three out of the eleven counts included were inadmissible with regard to the non-intentional variant. Neither did the Court find enough evidence to prove 'intent' and thus Corus Steel B.V. was acquitted with regard to counts 1, 3 and 4.

For the other counts, however, the Court found proven that Corus Staal B.V., intentionally infringed multiple provisions of the Environmental Management Act (notable: Articles 17.2, 18.18 and former 8.1 WM) and the Pollution of Surface Waters Act (notably: Article 30a Wvo). The following considerations were especially of relevance. The Court found that Corus Staal B.V., on multiple occasions, failed to report certain unusual operations and discharges of waste, therewith preventing the water quality manager from obtaining insight in these operations and discharges. Furthermore, the company failed to report unusual circumstances twice, therewith preventing the competent authority to act upon them. Attempting to restore compliance with the permits and only then report the circumstances is no ground for moderating the penalty according to the judge. The requirement to report the incident 'as soon as possible' serves important public interests and operates independently from the company's own priorities. To conclude, Corus Staal B.V. did not ensure the prevention of diffusion of harmful substances, therewith endangering the health of people living in neighbouring properties. The Court deemed a fine of Euros 12,500 appropriate. However, considering the time elapsed between occurrence of the offences and prosecution, the Court moderated the fine to Euros 10,000.

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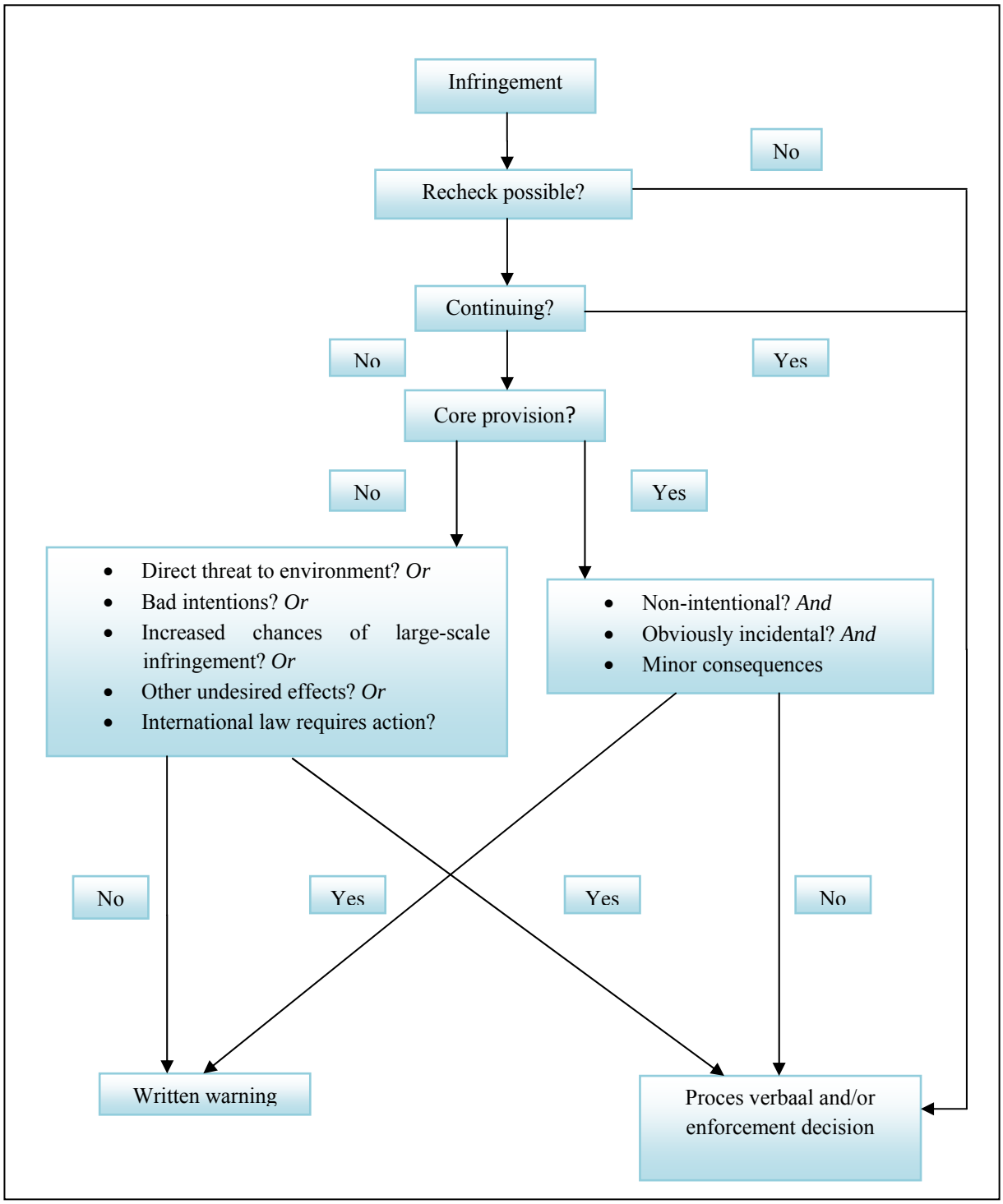

The Thermphos case as explored by the Committee Mans: highlighting enforcement issues

Thermphos, located in the Dutch Province of Zeeland, is one of the largest phosphor producers in the world. The installation was granted two permits in 1993 (with addendum in 2002) and in 1994 for the production of phosphor.

Between 2000 and 2007, no more than ten complaints were received about odours and respiratory disorders from the neighbouring population. The number of complaints increased regularly to reach 351 in 2010. Investigations in the direct vicinity of the plant showed concentrations in the air that were above the limits. Several times, Thermphos also exceeded it cadmium emission limits.

In February 2004 the province issues a formal warning as Thermphos has exceeded its cadmium emission limits. The warning requested that the company ended the infringement by 1st July 2004 at the latest. In case of non-compliance after this deadline, administrative sanctions would be instigated. In August 2004 Thermphos indicated it was unable to reduce its emissions of heavy metals in the short term, and requested a less stringent temporary limit until the end of 2006, when it was expected a structural solution could be achieved. A plan to do so is presented in November 2004 in the form of the Cadmium Reductionproject (CaRe). In March 2005 the province issued a temporary permit allowing for more emissions of heavy metals, as a bridge towards a structural solution that was to be reached by the end of 2006. On 24 November 2006, Thermphos asked for an extension of the temporary permit until 1 November 2007 because of delays in the CaRe project, and for the permission to emit an extra 6000 kilo of zinc. The Province agreed on 20 March 2007. It can already be noted that it would take until the end of 2010 before CaRe finally brought about the required decrease in heavy metals emissions.

In December 2007, another formal warning is issued when inspection shows that the measurement and registration systems of Thermphos were not sufficiently documented. The company was given until 1 April 2008 to solve the problems, otherwise one or more orders for periodic penalty payments would be issued. The Public prosecutor's office also issued a warning, stating that if the company would not abide by the warning of the Province, it would order the police to issue a (written) report

On 11 March 2008, a revised permit was issued that complies with the IPPC directive. The permit did not contain limits for dioxins, in spite of requests on behalf of environmental NGOs to do so. One NGO protested against the permit at the Council of State, notably about the lack of investigations on dioxin emissions and about emission limits for heavy metals. The Province explained that the new processes meant a reduction in water pollution but an increase in air pollution as a result.

On 4 December 2008 the province issued an order for periodic penalty payments because Thermphos has exceeded its cadmium emission limit. The company was to pay 25,000 euro for each violation of the monthly maximum amount, with a maximum of 300,000 euro.

On 22 April 2009, the Council of State annuled the permit issued in March 2008 considering, inter alia, that the Province decided on the emission limits in an incorrect manner. As a result, the old permits (of 1993 and 2002) became valid again and the penalty payment issued for cadmium was annulled.

Meanwhile, the company temporarily halted its production due to the economic crisis, but planned to resume work in June 2009. When dioxin emissions were measured, the Province requested to resume operation only after the company had explained which measures it would take to prevent further dioxin emissions. Satisfied that the company will meet these conditions, operation restarted in mid June 2009. RIVM examinations show in October 2009 that dioxin emissions did not bring about any acute dangers for public health.

In November 2009, the company requested a (temporary) permission not meet the legal norms for a specific amount of time and a new permit that would allow for dioxin emissions of 0.4 ng/m^3. The province allowed for a maximum emission of 0.3 ng/m^3 on 6 April 2010. In January 2010, two persons living nearby Themphos had requested the province to enforce the norms for inter alia dioxins and for ammonia. The requests were declared admissible but at the same time they were denied. The Province argued that although the company was not complying with legal requirements, legalisation was imminent as the province was to issue a positive decision with regard to the company's request for a temporary permission and amendments to the permit.

On 20 April 2010, an order for periodic penalty payments was imposed on Thermphos because of its zinc emissions in 2009. The company had one year to comply with the order. But as the new permit was issued in November 2010, the order has never been enforced. Meanwhile, following an inspection, that showed inter alia a lack of supervision, a large number of incidents and gaps in the emergency plans, on 26 April 2010, the VROM-inspectie addressed to the province a letter in which it is explained that the situation was very serious, calling for strict enforcement. It added that the VROM-inspection would otherwise consider issuing a formal request for enforcement. The Province answered that it did not understand the critique as to enforcement.

On 22 June 2010, an order for periodic penalty payments was issued because of exceedance of the cadmium emission limits. Because the validity was one year and a new permit was issued before the end of this time period, again the order is not executed. On 6 July 2010, another order was issued because of safety violations. The company had until August 2010 to take necessarymeasures. For each violation, 5,000 euro was to be paid. This leads to the payment of 10,000 euro.

In mid 2010, the Public Prosecutors office decides to start criminal investigations on violations of the Environmental Management Act by Thermphos in relation to dioxins and heavy metals emissions.

On 15 July 2010, a draft permit to carry out changes was subject to public consultation. This was followed by public discussion, in particular within the media and discussions in the Provincial Executive. Consequently, the tolerance permit of 6 April 2010 for emissions of dioxins was revoked on 19 November 2010. According to the civil servant responsible for enforcement, this was a first step towards closing down the plant (Minutes of DG Provincial Executive, 19 November 2010). It was decided to carry out an independent investigation. At the end of October 2010, an investigation into the oduors emitted showe very high levels with limits for residential areas exceeded by a factor four. Measurements of dioxin emissions by an independent certified bureau revealed that the company'emissions were below the permit conditions as well as below emission limits set in the Dutch emission guideline.[345]

CaRe brought about results only four years after the initially agreed deadline. Among the reasons for the delays were complications in the implementation of new techniques reducing cadmium emissions. According to some, the company did not have a sense of urgency in the CaRe project implementation, but this did not bring about any enforcement actions from the side of the province. Instead, the province allowed for the delays and only issued a couple of formal warnings and orders for periodic penalty payments. According to the committee Mans, the way in which the matter was dealt with shows that the civil servants felt too much that they were owning the problem and that they were too close to Thermphos' interests. Mans also noted that the Provincial Executive only got involved in the matter after the television shows. When asked in February 2007 by an NGO about dioxins measurements, the province answered that no such measurements took place because it was expected that the emissions would be very low, while, measurements by Thermphos in October 2008 showed dioxins emissions. This was confirmed by measurements made by the National Institute for Public Health and the Environment, which showed that there was no acute risk for public health.

[345] Nederlandse emissierichtlijn, NeR

Nevertheless, the province put pressure on the company to reduce its dioxin emissions. In the end, however, the company was granted a considerable amount of time - namely until 2015 - to meet the dioxin emission limits.

The committee Mans concluded that the province did not adequately used its permitting, supervising and enforcement competences in the Thermphos dossier, notably because it did not deal with the matter in a coherent and consistent manner. The focus was on partial solutions to parts of the problems, rather than on an integral and adequate solution. The Committee also doubted whether the civil service of the province has enough 'in house' expertise on issues like public health, toxicology and medical environmental science, or not.

The Committee also concluded that the Province did not act in a resolute way when rather than enforcing the emission limits, it allowed twice for relaxation of the limits. The company was not encouraged to reduce the emissions of dangerous substances in the short term as a result. Another conclusion is that the civil service was steering the process to a large extend, instead of the Provincial Executive steering the civil service. Also, the Provincial Council was not alert enough.

The main recommendation by the committee Mans is that issuing permits and enforcement is to be regarded as a public task rather than a service to companies. The committee also recommended that special circumstances in an enforcement procedure should be primarily considered as a problem for the company at stake rather than as a problem of the province. It also recommended a better coordination with the public prosecutor's office in cases of serious violations.

Annex VI- United Kingdom

Sanctions and procedures applicable to breaches of the legislation on industrial emissions in the UK

Executive Summary

Until recently, 'administrative sanctions' as they exist in most EU Member States were not available in the UK for breaches of environmental legislation. The recent introduction of 'civil sanctions' in the UK has given regulators additional administrative powers to deal with environmental offences, however currently these do not extend fully to the IPPC regime. For the purposes of this analysis, 'administrative enforcement measures' and 'criminal sanctions' remain the primary enforcement measures available for breaches of IPPC legislation.

Unlike the legal systems in many EU Member States, there is no separate 'administrative code' in the UK for applying administrative sanctions in the event of non-compliance with IPPC obligations. Administrative enforcement measures and criminal sanctions relating to IPPC installations are primarily determined by one piece of legislation, the Environmental Permitting (England and Wales) Regulations 2010, as amended by the Environmental Permitting (England and Wales) (Amendment) Regulations 2010 ('the EP Regulations'), and to a lesser extent by the Environment Protection Act 1990 and the Water Resources Act 1991. This legislation provides the regulator with a range of administrative powers to carry out its enforcement functions. These functions include the power to serve notices for a breach or a likely breach of a permit condition. UK legislation also provides for criminal sanctions to be imposed for specific breaches, such as operating a regulated facility in breach of an environmental permit condition or for failing to comply with an administrative notice.

The way in which these sanctions are applied in practice is determined by reference to various regulatory guidance and criminal procedure documents. These documents provide regulators with clear guidance on the factors to be taken into account when deciding what sanctions to impose. In the UK, the Environment Agency (EA) has its own 'outcome-focused' procedure and guidance, which it uses to determine the sanctions it will apply with reference to the outcome to be achieved. This includes the use of administrative measures such as issuing advice, warnings, and notices, as well as applying the criminal procedure to prosecute where it is deemed appropriate. Where a prosecution may be deemed ineffectual, the regulatory authority may apply to the court for a court order or injunction to stop a particular activity from being carried out.

More recently, new civil sanctioning powers were introduced in the UK pursuant to the Environmental Civil Sanctions (England) Order 2010 and the Environmental Civil Sanctions (Miscellaneous Amendments) (England) Regulations 2010. This legislation was made under powers given to the Secretary of State for the Environment in the Regulatory Enforcement and Sanctions Act 2008 and provides regulators with additional enforcement options for certain breaches of environmental law. These include the power to impose Fixed Monetary Penalties (FMP's), Variable Monetary Penalties (VMP's) and Stop Notices. These civil sanctioning powers do not currently apply to breaches of the EP Regulations.

The table below indicates the Articles of the IPPC Directive covered by a sanction in the UK. The category of administrative (quasi) criminal sanctions does not exist in the UK, thus this column is left blank in the table below.

Table 1: Enforceable provisions covered by penalties in the UK

Article	Administrative measures and sanctions	Criminal sanctions	Administrative (quasi) criminal sanctions
IPPC Directive			
Catch-all	EP Regulations 2010, Regulation 20(1), Regulation 22(1), Regulation 36, Regulation 37, Regulation 42, Regulation 57, Schedule 22, Paragraph 9, Schedule 22, Paragraph 10	-	
4	-	EP Regulations 2010, Regulation 12(1)	
5	-	-	
6	-	EP Regulations 2010, Schedule 7, paragraph (4)	
12 (1)	-	EP Regulations 2010, Schedule 7, paragraph 5(1)(d))	
12 (2)	-	EP Regulations 2010, Schedule 7, paragraph 5(1)(d))	
14 (a)	-	-	
14 (b)	-	EP Regulations 2010, Schedule 7, paragraph 5(1)(e))	
14 (c)	-	-	

1. Applicable sanctions

1.1. Overview of UK legislation

UK legislation is composed of three different jurisdictions: i) England and Wales, ii) Scotland and iii) Northern Ireland. Each jurisdiction has separate secondary legislation, enforcement bodies and procedures. For the purposes of this study, however, the 'UK' specifically refers only to the legislation and legislative procedures in England and Wales.

UK legislation in respect of industrial installations has undergone significant change in recent years. The first phase of changes to the 'environmental permitting' regime was introduced by the Environmental Permitting (England and Wales) Regulations 2007, which established a common permitting programme for waste and pollution permitting and control regimes, replacing 41 separate sets of regulations.[346] In 2010, The Environmental Permitting (England and Wales) Regulations 2010 ("the EP Regulations") were introduced as a second phase of environmental permitting. These Regulations revoked the 2007 Regulations and extended the common permitting system to bring all permitting regimes under a single system. The Regulations set out the obligations of operators as well as the powers and enforcement tools available to the regulators for handling instances of non-compliance.

Furthermore, prior to April 2010 the UK legal system was different from the continental legal systems of other EU Member States in that 'civil sanctions' were not available as a means of enforcing environmental legislation. However, major legislative changes in April 2010 introduced new powers for the regulators to impose civil sanctions for a range of environmental offences. Although these powers are not currently applicable to industrial installations, an understanding of these new enforcement powers along with their development and policy background will be considered here.

The majority of IPPC installations (approximately 90%) are regulated by the EA[347], the remainder are regulated by local authorities. Pursuant to Regulation 32 of the EP Regulations 2010, the EA is responsible for Part A(1) installations, Part A(1) mobile plant and certain Waste Operations. Local authorities are responsible for the regulation of Part A(2) installations and Part A(2) mobile plant[348] as well as Part B installations and Part B mobile plant. Local Authorities are not responsible for waste operations (unless it is part of a Part B activity). The full scope and classification of installations are set out in Schedule 1, Part 2 to the Regulations.

The EA guidance defines "sanction" as an enforcement requirement (such as a notice), a binding legal agreement or even a penalty applied by them or by a court.[349]

1.2. Description of administrative sanctions in the UK

Regulations 32 to 35 of the EP Regulations set out the regulator's discharge of functions in relation to a regulated facility. For example, Regulation 34 requires the regulator to periodically review environmental permits and make appropriate periodic inspections of regulated facilities. Regulation 35 applies specific provisions to those regulated facilities which require environmental permits. These provisions are specified in the Schedules to the EP Regulations, of which Schedules 7 and 8 are of specific relevance to IPPC installations. For example, paragraph 4 of Schedule 7 requires the regulator to ensure that every application for the grant of an environmental permit includes the information specified in Article 6(1) of the IPPC Directive. Paragraph 5 of Schedule 7 also requires the regulator to

[346] Environmental permitting summary: http://www.defra.gov.uk/environment/policy/permits/documents/ep2010booklet.pdf
[347] Assessment of the Implementation of the IPPC Directive in the UK, Final Report, ENTEC, January 2008 page 19
[348] The Environmental Permitting (England and Wales) Regulations 2010, Regulation 32. Also see local authorities general guidance manual: http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm
[349] Environment Agency, Enforcement and Sanctions – Guidance, Page 3

exercise its 'relevant functions' so as to ensure compliance with specific provisions in the IPPC Directive. A failure of the operator to comply with any of the specified provisions will trigger the statutory power of the regulator to 'exercise its relevant functions' . The 'Relevant functions' of the regulator are set out at Regulation 9 and include the power to serve:

- *Enforcement notices* (Regulation 36 of the EP Regulations) to restore or remediate harm or damage or to bring an activity or operation under regulatory control. This may be served where an operator has contravened, is contravening or is likely to contravene an environmental permit condition.
- *Suspension notices* (Regulation 37 of the EP Regulations) to stop offending or to bring an activity or operation under regulatory control. They may also include remediation steps;
- *Prohibition notices* in respect of Groundwater activities (Schedule 22, Paragraph 9 of the EP Regulations) to stop a specific activity which has a certain polluting effect on groundwater. These may be served on any person who is carrying out or proposing to carry out an activity that might lead to a direct or indirect discharge to groundwater;
- *Variation notices* (Regulation 20(1) of the EP Regulations) in order to bring a permitted activity or operation under regulatory control. This authorises the regulator to vary a permit on the application of the operator or on its own initiative, e.g. where the regulator believes that a permit condition does not address an issue as clearly or specifically as it could.[350]
- *Revocation notices* (Regulation 22(1) of the EP Regulations) in order to stop offending. This may be used where other enforcement tools have failed to protect the environment (however it is rarely used in practice)[351];
- *Notices requiring a permit* (Schedule 22, paragraph 10 of the EP Regulations). This may be used in order to stop offending for a specific groundwater activity. It allows the regulator to serve a notice on any person who is, or is intending to carry out an activity on or in the ground that might lead to the direct or indirect discharge of pollutants to groundwater, and require them to hold an environmental permit.

Table 2 below indicates the types of offences and related penalties in the UK for each of the key enforceable obligations under the IPPC Directive. It should be noted that there are no specific administrative penalties in the UK for each of the four obligations. However, please refer to sections 1.5 and 1.6 on the administrative sanctions which are available to the regulator.

[350] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 3.16
[351] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 3.57

Table 2: Directive 2008/1/EC (IPPC Directive): types of offences and related criminal penalties in the UK

	Criminal	
	Offences	**Penalties**
Obligation to apply for a permit for new or existing installations	Failure to operate a regulated facility with an environmental permit, or to knowingly cause or permit the contravention of s12(1) ***Regulation 38(1) Environmental Permitting (England and Wales) Regulations 2010***	A person guilty of an offence under Regulation 38(4) (failure to comply with a notice under Regulation 60(1) requiring the provision of information) is liable: • on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1) Environmental Permitting (England and Wales) Regulations 2010***
Obligation to supply information for application for permits	No specific offence for failure to supply information on the application, but the Regulation requires regulator to ensure that application includes the relevant information under the Directive. ***Schedule 7Para 4(1)*** Failure to comply with a notice under Regulation 60(1) requiring the provision of information. ***Regulation 38(4)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to notify the competent authority of any changes in the operation of an installation	No specific offence for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 7, Paragraph 5(1)*** For example, pursuant to Regulation 34, the regulator must periodically review environmental permits and make appropriate periodic inspections. If the regulator considers that the operator has contravened a permit condition, then they may serve an Enforcement Notice. Failure to comply with the requirements of an enforcement notice constitutes an offence. ***Regulation 38(3)***	No specific penalties for failure of operator to notify, but Regulation requires regulator to ensure compliance with the relevant provisions of the Directive. ***Schedule 7, Paragraph 5(1)*** A person guilty of an offence under Regulation 38(3) (failure to comply with the requirements of a notice specified in that Regulation, such as an Enforcement Notice) is liable: • on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both. ***Regulation 39(1)***
Obligation to comply with the conditions set in the permit or mandatory ELV's	Failure to comply with/contravene an environmental permit condition ***Regulation 38(2)***	• on summary conviction to a fine not exceeding £50,000 (Euros 59,772) or imprisonment for a term not exceeding 12 months, or to both; or • on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both.

		Regulation 39(1)

*ELVs: Emission Limit Value

1.3. Additional (miscellaneous) administrative powers include:

- *Remediation notices* (Regulation 57 of the EP Regulations) in order to prevent or remedy pollution. This gives the regulator the power to arrange for steps to be taken to remove a risk of pollution where the operation of a regulated facility under a permit involves a serious risk. It also gives the regulator the power to remedy the effects of pollution if the commission of certain offences (e.g. operating without a permit) cause pollution, or it suspects that an offence is being or has been committed and pollution is being or has been caused as a result. If the Regulator arranges for steps to be taken, it may recover the cost of taking those steps from the operator;

- *The power to obtain enforcement by the High Court* (Regulation 42) This may be in the form of:
    - a court order to either stop an activity or to carry out a particular activity. If the regulator considers that proceedings for a breach of notice (constituting a criminal offence) would afford an ineffectual remedy, it may take proceedings in the High Court in order to secure compliance with the notice; or
    - an injunction to restrain any criminal act, particularly where a fast response is required;[352]

- *Stop notice* (Section 46 of the Regulatory Sanctions and Enforcement Act 2008 (RESA)). This provides regulators with new civil sanctions, where they reasonably believe that an offence under section 33(1) of the Environmental Protection Act 1990 has been or is likely to be committed (by any natural or legal person) for the unauthorised or harmful deposit, treatment or disposal etc of waste, and where they reasonably believe that the activity is causing, or poses a significant risk of causing, serious harm to human health or the environment. A stop notice prohibits a person from carrying out of an activity until the steps specified in the notice have been taken. It should be noted that while Stop notices are not currently available as a means of enforcement for breaches of the EP Regulation, the 'suspension notice' power (identified in section 1.4 above) essentially amounts to the same thing.

- *Information notice* (Regulation 60 of the EP Regulations, Section 71 of the Environmental Protection Act 1990 in relation to waste, and Section 202 of the Water Resources Act 1991), requiring any person to provide such information within such period as specified in the notice.

- *Anti-Pollution Works notice* (Section 161A Water Resources Act 1991) – to prevent or remedy pollution of controlled waters. It requires the person on whom it is served to carry out specified works or operations, where it appears that any poisonous, noxious or polluting matter or waste is present in any waters or any controlled waters are being/have been/likely to be harmed.

- *Statutory Nuisance* (Part III Environmental Protection Act 1990, (EPA)). Where a local authority is satisfied of the existence or of the likely occurrence or recurrence of a statutory nuisance, it must generally serve an abatement notice in accordance with section 80(2) of the EPA. An abatement notice may be served on the person responsible for the nuisance, on the owner of the premises (where the nuisance arises from any structural defect), or on the owner or occupier of the premises (where the person responsible cannot be found or the nuisance has not yet occurred). The notice may require the abatement of the nuisance or prohibit or restrict its occurrence or recurrence, or require the execution of works and the taking of other steps as may be necessary (section 80(1)). The EPA lists those activities which are deemed to be statutory nuisances, the basic requirement being that the activity must be considered either a

[352] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 4.2.

nuisance or prejudicial to human health.[353] Statutory nuisances may include: smoke emitted from premises, any dust, steam, smell or other effluvia, any accumulation or deposit or noise emitted from premises.

Most notices under the EP Regulations may only be served on the 'operator' of the regulated facility. Pursuant to regulation 7 of the EP Regulations, the 'operator' is the person who has control over the regulated facility. However, prohibition notices, stop notices, information notices, anti-pollution works notices, notices requiring a permit and abatement notices may be served on any relevant 'person' (natural or legal).

Table 3: Number of EA prosecutions, formal cautions and enforcement notices issued 2008 – 2010

Year	Number of prosecutions commenced	Number of prosecutions successful	Formal cautions issued	Enforcement Notices issued
2008	5	5	3	29
2009	6	5	6	10
2010	3	3	5	5

Source: Environment Agency

2. Administrative procedure

2.1 General elements on the legal tradition and potential evolution

2.1.1 Regulatory guidance

Although UK legislation lays down the administrative powers of the regulators, the way in which these powers are applied in practice is determined by reference to various guidance documents. These include documents by the Department of the Environment and Rural Affairs (DEFRA),[354] as well as the Regulators' Compliance Code[355], and the Cabinet Office Enforcement Concordat[356] which '*contain important safeguards to ensure that any enforcement action taken is proportionate to the risks posed to the environment and to the seriousness of any breach of the law.*'"[357] These documents include guidance on risk assessment, compliance, enforcement and inspections of regulated facilities.

2.1.2 Aims of administrative sanctions/measures

The Regulators' Compliance Code (RCC) which is incorporated into the Environment Agency's

[353] Environmental Protection Act 1990, Section 79.
[354] DEFRA: Core Environmental Permitting guidance (v 3.1) - updated March 2010. Contains guidance for those operating, regulating or interested in facilities that are covered by the Environmental Permitting (England and Wales) Regulations 2010 SI 2010 No.675 (as amended) ('the Regulations'). http://www.defra.gov.uk/environment/policy/permits/documents/ep2010guidance.pdf. Also see local authorities general guidance manual: http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm
[355] Statutory Code of Practice for Regulators, Department for Business Enterprise and Regulatory Reform, 17 December 2007. http://www.berr.gov.uk/files/file45019.pdf. This document incorporates the Hampton principles of effective inspection and enforcement, available at http://www.berr.gov.uk/files/file22988.pdf
[356] Enforcement Concordat, 1998 //www.berr.gov.uk/bre/inspection-enforcement/implementing-principles/regulatory-compliance-code/enforcement/page46822.html
[357] DEFRA: Core Environmental Permitting guidance (v 3.1) - updated March 2010, page 56

enforcement policy[358] provides guidance to regulators on appropriate compliance and enforcement actions. Regulation 8.3 of the RCC states that when devising and implementing regulatory policies, regulators are required to ensure that their sanctions and penalties policies are consistent with the Macrory Penalty Principles (see *section 2.1.3* below).[359] This means that their sanctions and penalty policies should:

i) Aim to change the behaviour of the offender;
ii) Aim to eliminate any financial gain or benefit from non-compliance;
iii) Be responsive and consider what is appropriate for the particular offender and regulatory issue, which can include punishment and the public stigma that should be associated with a criminal conviction;
iv) Be proportionate to the nature of the offence and the harm caused;
v) Aim to restore the harm caused by regulatory non-compliance, where appropriate;
vi) Aim to deter future non-compliance.

2.1.3 Environment Agency approach to regulation

As well as following the Macrory Penalty Principles, the Environment Agency sets out 5 principles underlying their commitment to 'firm but fair regulation':

- proportionality in the application of law and in securing compliance;
- consistency of approach;
- transparency about how the Environment Agency operates and what those they regulate may expect from them;
- targeting of enforcement action; and
- accountability for the enforcement action the they have taken;[360]

The Environment Agency has its own enforcement and sanctions guidance to help decide the appropriate course of action which it will take in cases of non-compliance with the law.[361] This includes an 'Offence Response Options' document which EA staff use when considering what responses are available to achieve its outcomes.[362] The term 'enforcement' includes any action where it suspects an offence has occurred or is about to occur. The EA explains its approach in applying the legislation as follows:

'*We will use the full range of enforcement and sanctioning tools that are available to us, in combination if necessary, to achieve the best outcomes for the environment and for people. This may range, for example, from providing advice and guidance through to prosecution. Within this overall approach, where an offence has been committed we will consider issuing some form of sanction as well as any other preventative or remedial action taken to protect the environment and people*'.[363]

The primary purpose of the EA's approach to compliance monitoring and enforcement is to ensure that an unacceptable risk of harm or pollution does not occur or will not be repeated and that legitimate business is not undermined.[364] Its approach to enforcement is described as 'outcome-

[358] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 1.6
[359] Regulator's Compliance Code, Statutory Code of Practice for Regulators, http://www.berr.gov.uk/files/file45019.pdf. Regulation 8.3 refers to the principles set out in 'Regulatory Justice: Making Sanctions Effective', Final Report, Professor Richard Macrory, November 2006 http://www.berr.gov.uk/files/file44593.pdf
[360] Environment Agency, Enforcement and Sanctions - Statement, Page 4
[361] See Environment Agency: Enforcement Powers, Guidance Series No.11: http://www.environment-agency.gov.uk/static/documents/Business/RGN_No__11_Enforcement_powers.pdf and the Environment Agency's Enforcement and Sanctions Guidance http://publications.environment-agency.gov.uk/pdf/GEHO0910BSZL-E-E.pdf
[362] Offence Response Options (ORO) document: http://publications.environment-agency.gov.uk/pdf/GEHO0910BSZN-E-E.pdf, 4 January 2011
[363] Environment Agency, Enforcement and Sanctions Guidance, Page 3
[364] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 1.16.

focused' " i.e. it considers the environmental outcomes to be achieved when deciding which enforcement and sanctioning tools to use.[365]

i) Advice and Guidance: As an initial enforcement measure, the EA will normally provide advice and guidance after the commission of an offence or where an offence is likely to be committed, unless this would have the effect of undermining any enforcement action.[366] The primary aim of providing such advice and guidance is to assist the operator in complying with its legal obligations. In cases of minor infringement, this may merely involve pointing out the issue to the operator. However, unless the offence is very minor and the operator can demonstrate its compliance as soon as reasonably practicable the EA is likely to take additional enforcement measures. Moreover, its guidance states that any advice or guidance is provided without prejudice to any of the EA's other enforcement responses in the event of non-compliance.[367]

ii) Warnings: A warning or site letter may also be deemed appropriate in response to a minor breach of a condition or where an offence is suspected to have taken place. A warning may be issued with the aim of achieving any of the four types of environmental outcomes described below (see section *iii* '*other measures'* below).[368] A Compliance Assessment Report (CAR1) form may also be used to record details of the breach, and an action plan with timescales may be agreed and recorded on the form.[369]

iii) Other measures: Where issuing advice and guidance or a warning do not achieve the objective, or in more serious cases, it may be considered more proportionate to consider other measures such as an enforcement notice or criminal sanctions. In more serious cases, a suspension notice or even a revocation notice may be more appropriate.[370] As part of the EA's 'outcome-focused' approach to enforcement, these other measures (and corresponding tools) are divided into four categories:[371]

Outcome/Aim	Prescribed action
1. To stop offending (with the aim of stopping an illegal activity from continuing/occurring):	• Suspension notice (Regulation 37) • Prohibition notice (Schedule 22, paragraph 9) • Notice requiring a permit (Schedule 22, paragraph 10) • Revocation notice (Regulation 22) • Anti-Pollution Works notice (section 161A of the Water Resources Act 1991) • Court Order (Regulation 42) • Injunction (Regulation 42)
2. To restore and/or remediate (with the aim of putting right environmental harm or damage that has already occurred):	• Enforcement notice (Regulation 36) • Remediation notice (Regulation 57)
3. To bring under regulatory control (with the aim of bringing an illegal activity into compliance with the law):	• Variation notice (Regulation 20) • Enforcement notice (Regulation 36) • Suspension notice (Regulation 37) • Remediation notice (Regulation 57)

[365] For the purposes of the Environment Agency's own guidance, a sanction is defined as an 'enforcement requirement (such as a notice), a binding legal agreement or even a penalty applied by us or by a court'.
[366] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 2.3.
[367] Environment Agency Enforcement and Sanctions Guidance, point 6.1
[368] Enforcement and Sanctions Guidance, point 6.2
[369] Environment Agency Regulatory Guidance Series No 11, Enforcement powers, point 1.18
[370] Environment Agency, Regulatory Guidance Series number 11, point 1.18
[371] Environment Agency, Enforcement and Sanctions Guidance, Page 4. The prescribed actions specified here are those which are relevant to IPPC obligations

4. To deter and/or punish (with the aim of punishing an offender and/or deterring future offending):	• Offences (see section below on criminal sanctions) • Injunction (see above under Outcome/Aim 1) • Stop notice (Section 46 of the Regulatory Sanctions and Enforcement Act 2008)

iv) Public interest factors: The EA will also take a number of 'Public interest factors' into consideration when deciding on the type and severity of sanction. These include:

- Intent of the operator: Offences committed deliberately, recklessly or with gross negligence are more likely to result in prosecution.

- Foreseeability: Where the circumstances leading to the offence could reasonably have been foreseen and no avoiding/preventative measures were taken, the response will normally go beyond advice/guidance or a warning.

- Environmental effect: The response will address the potential and actual harm to people and environment. Normally, where an offence is classified as category 1 or 2 under the Common Incident Classification Scheme (CICS) or Compliance Classification Scheme (CCS) (*see section 2.2.5 iii) below*), the EA will consider a prosecution, caution or Variable Monetary Penalty (VMP, a civil sanction).

- Nature and seriousness of the offence: e.g. providing false or misleading information or outright criminal activity will normally lead to a prosecution.

- Financial implications: e.g. where profits are made or costs are avoided, this will normally lead to a VMP or prosecution.

- Deterrent effect: on the offender and others will be taken into account when choosing a sanction.

- Previous history and repeat offending: The degree of offending and/or non-compliance will be taken into account

- Attitude of the offender: A poor attitude towards the offence or uncooperativeness with investigation or remediation will normally lead to a prosecution or VMP.[372]

The EA's general approach to enforcement is set out in its Enforcement and Sanctions Guidance, which includes a 'Sanctions decision tree' to help its staff decide the best course of action to take (Annex I).

2.1.4 Development of a new approach to civil sanctions[373]

In 2005, a report by Sir Philip Hampton set out principles for better regulation.[374] These are now incorporated in the Regulator's Compliance Code (as mentioned in *Section 2.1.2* above) to which Regulators must have regard. The report concluded that sanctions were not a deterrent to serious non-compliance and proposed a review of penalty regimes (which was subsequently carried out by Professor Richard Macrory in 2006). The resultant report, 'Regulatory Justice: Making Sanctions Effective' concluded that the existing system was too heavily reliant on criminal prosecutions which

[372] Environment Agency's Enforcement and Sanctions Guidance, page 12
[373] Civil sanctions are expected to extend to the Environmental Permitting (England and Wales) 2010 from April 2011.
[374] Philip Hampton, 'Reducing administrative burdens: effective inspection and enforcement'. This document sets out the Hampton principles of effective inspection and enforcement

were not always a proportionate response to the seriousness of the offence. The report recommended a broad 'toolkit' of civil sanctions for regulators to promote and enforce regulatory compliance. Among its recommendations included the extension of flexible administrative monetary sanctions and the strengthening of statutory notices to work alongside the criminal law in combating non-compliance. It was believed that such regulatory sanctions would provide a more flexible and proportionate approach to non-compliance and help to resolve many cases more quickly and effectively. In response, the Regulatory Enforcement and Sanctions Act (RES) 2008 was introduced to create enabling powers for a range of civil sanctions. These civil sanctions include:

- Compliance notice: A requirement to take specified steps within a stated period to secure that an offence does not continue or happen again.

- Restoration notice: A requirement to take specified steps within a stated period to secure that the position is, so far as possible, restored to what it would have been if no offence had been committed.

- Enforcement undertaking: enabling a person, whom a regulator reasonably suspects of having committed an offence, to give an undertaking to a regulator to take one or more corrective actions set out in the undertaking.

- Fixed monetary penalty (FMP): A requirement to pay a monetary penalty of a fixed amount.

- Variable monetary penalty (VMP): A requirement to pay a monetary penalty of an amount determined by the regulator reflecting the circumstances of the offence.

- Third party undertaking: enabling a person who has received a regulator's notice of intent to impose a VMP, for example, to give a commitment to take action to benefit a third party affected by the non-compliance.

- Stop notice: A requirement for a person to stop carrying on an activity described in the notice until it has taken steps to come back into compliance.

On 6th April 2010 the Environment Agency received new formal powers pursuant to the Environmental Civil Sanctions (England) Order 2010 and The Environmental Sanctions (Miscellaneous Amendments) (England) Regulations 2010. These new powers allow regulators to impose the above civil sanctions for a range of environmental offences.[375] Currently these new civil powers are not directly applicable to the Environmental Permitting (England and Wales) Regulations 2010. However, they may be applied where the regulator has reasonable grounds to believe an offence under section 33(1) of the Environmental Protection Act has been or is likely to be committed (for the unauthorised or harmful deposit, treatment or disposal etc of waste). For example, a Stop Notice pursuant to Section 46 of the Regulatory Enforcement and Sanctions Act (RES) 2008 may be served to prohibit a person from carrying out of an activity until steps specified in the notice have been taken. The aim of these civil sanctions is to provide flexibility as well as a more proportionate and effective response to non-compliance.[376]

2.3 Inspections

2.2.1 General information

[375] Currently the instruments only apply to England. The Welsh Assembly Government is considering introducing similar instruments which would enable the Environment Agency to use civil sanctions in Wales.
[376] See DEFRA document: Civil sanctions for environmental offences, Guidance to regulators in England on how the civil sanctions should be applied, and draft guidance for Wales, January 2010

According to the Environment Agency, a total of 2481 facilities[377] fall within the scope of the Environmental Permitting (England and Wales) Regulations 2010, for which are currently 246 dedicated Pollution Prevention and Control (PPC) officers and approximately 3000 warranted officers who play a role in inspection and/or enforcement activities relating to IPPC installations. In 2010, the Environment Agency conducted between 6000-6500 inspections, and spent a total of 223,460 hours on inspection and enforcement of IPPC facilities. During the same period, a total of £28,9 million was generated from these facilities by way of the Environment Agency's 'Subsistence charge' (*see Section 2.2.2 b ii) below*).

2.2.2 Key Elements of the inspection procedure

The inspection powers of UK regulators are determined by legislation and policy guidance. Regulation 34(1) of The Environmental Permitting (England and Wales) Regulations 2010 requires the regulator to periodically review permits, while regulation 34(2) states that the regulators must undertake periodic inspections of regulated facilities. However the EP Regulations do not provide specific requirements on how or when inspections or a review of permits should take place.

In certain cases, the regulator may be able to exercise specific inspection powers where it is deemed reasonable to do so. Section 108 of the Environmental Protection Act 1995 (EPA) provides powers of entry to an enforcing authority (which includes the Environment Agency and local authority) to investigate, where there are reasonable grounds to believe it is necessary, for any one the following three purposes:

1. To determine whether pollution control law is being complied with;
2. To exercise or perform one or more of the pollution control functions of that authority;
3. To determine whether and if so, how such a function should be exercised or performed;

Pursuant to section 108(1) of the EPA, an inspecting person must be authorised in writing and must act in accordance with that authorisation. Section 108(4)(a) states that entry must be at a reasonable time, or at any time in the event of an emergency. Section 108(4)(c) states that the authorised person is permitted to carry out such examination and investigation as may be necessary. This may include the taking of measurements, photographs and making such recordings as considered necessary for the purposes of such examination or investigation, pursuant to s108(4)(e). The authorised person may also, on giving at least seven days' notice, carry out experimental borings and install, keep or maintain monitoring and other apparatus. Such notice is not required in an emergency (Section 108(5) and (6)).[378]

a) Policy Guidance

The ways in which regulators exercise their inspection powers are also derived from policy guidance. The Hampton Report lays down the basic principles relating to inspection and enforcement to which regulators must have regard. The first principle states that '*Regulators should use comprehensive risk assessment to concentrate resources on the areas that need them most* '. It also states that '*No inspection should take place without a reason*' .[379]

Regulation 6 of the Regulatory Compliance Code states that ' *Regulators should ensure that inspections and other visits, such as compliance or advice visits, to regulated entities only occur in accordance with a risk assessment methodology…except where visits are requested by regulated entities, or where a regulator acts on relevant intelligence.*'[380]

[377] Excluding farms and "Low Impact Installations" (LII's)
[378] The Environment Protection Act 1995, section 108
[379] Philip Hampton, Reducing administrative burdens: effective inspection and enforcement', page 7
[380] The Regulators' Compliance Code p 14

In addition, DEFRA, in its Core Environmental Permitting Guidance, states that risk-based compliance assessment should:

- Target facilities that: pose the greatest risk to the environment or human health; have poorer standards of operation; fail to comply with terms and conditions of the permit; or have a greater adverse impact;
- Reduce the regulatory burden on operators whose standard of operations are consistently high; and
- Take into account the different stages in the lifetime of a facility;

DEFRA also states that checking compliance with the terms and conditions of the permit is the principle way of assessing the operator's performance in relation to its responsibility for ensuring that the regulated facility does not cause pollution.[381] The inspection process can include reviewing information from the operator as well as carrying out independent monitoring, site inspections, in-depth audits and other compliance-related work. DEFRA also makes it clear that the regulator's policies and procedures for the environmental permitting regime should have regard to the Recommendation of the European Parliament and of the Council (2001/331/EC).[382]

b) Environment Agency Approach

The EA's approach to inspections reflects their risk-based methodology for compliance assessment. Operators are primarily responsible for providing information for permit applications and for self-monitoring of their activities. This is supported by the EA's sector-specific and technical and regulatory guidance, which sets out its approaches for identifying and assessing the risks associated with particular activities.[383]

The EA also uses its Pollution Inventory to provide an annual record of pollution in England and Wales from selected activities. Pursuant to section 60(1) of the EP Regulations, operators are required to complete a pollution inventory reporting form, providing the EA with data on annual emissions. Some of this data is available on the EA's website on its 'What's in your backyard' service.[384] In addition, the EA uses a number of tools to monitor compliance and to assess the risk from facilities. The Operator Monitoring Assessment (OMA) enables the Environment Agency to assess the quality and reliability of self-monitoring, while inspections are based on Operational Risk Appraisal (OPRA), The Common Incident Classification Scheme ('CICS'), Compliance Classification Scheme (CCS), and Compliance Assessment Plans (CAPs).[385] The information gathered from these tools is used to identify those facilities which pose the greatest risk and can be used as a basis for inspections.

i) Operator Monitoring Assessment (OMA)

An OMA is carried out by an EA Officer who interviews relevant site personnel, views appropriate documentation and inspects the monitoring location. The EA records relevant information that reflects the quality and reliability of operators' self-monitoring and associated issues. The results are used to assess operator's self-monitoring and to provide an indication of required improvements. They are also used to help prioritise and target the EA's independent monitoring/auditing of point source emissions.[386] The OMA applies the Monitoring Certification Scheme (MCERTS), which provides the

[381] DEFRA: Core Environmental Permitting guidance (v 3.1), point 11.3
[382] DEFRA: Core Environmental Permitting guidance (v 3.1), point 11.6
[383] See Environment Agency's Horizontal Guidance Note H1, Environmental risk assessment for permits
[384] Available on the Environment Agency's website: http://www.environment-agency.gov.uk/business/topics/pollution/32314.aspx
[385] National Audit Office, Effective Inspection and enforcement: Implementing the Hampton vision in the Environment Agency, page 29 Available at http://www.nao.org.uk/publications/0708/hampton_environment_agency.aspx
[386] Environment Agency, Guidance on undertaking an Operator Monitoring Assessment of emissions to air and /or water, Version 3, 2009 http://publications.environment-agency.gov.uk/pdf/GEHO0409BPZD-e-e.pdf. A list of monitoring guidance documents used by the Environment Agency can be found at http://www.environment-agency.gov.uk/static/documents/Business/mon_guide_summary.pdf

framework for the Environment Agency's quality requirements by monitoring activities that affect the environment.[387]

ii) Operational Risk Appraisal

Operational Risk Appraisal (Opra) is a screening tool used to assess the risk to the environment from sites that are regulated with environmental permits. Opra uses five elements to assess the level of risk of the activities carried out at the site, each of which is graded from A (low risk) to E (high risk):

- **Complexity** (e.g. activities carried out, potential for accidents; size; public confidence);
- **Location** (e.g. proximity to habitation; proximity to sensitive sites; potential for direct releases to water; flooding; air quality management zones);
- **Emissions** (e.g. type and quantity; media; impact);
- **Operator performance** (e.g. presence/ absence of management systems; enforcement history);
- **Compliance rating** (e.g. compliance with permit conditions; potential impact of non-compliance; additional effort to manage; non-compliance).[388]

Each activity carried out at the installation is converted to an Opra-band rating of A-E, or A-F for compliance rating, depending on the complexity of the operation and the level of 'regulatory effort' required.[389] The information is used to inform the EA's decisions on resource allocation, thereby allowing it to target facilities which pose the greatest risk. The bands are also used to calculate the operator's annual subsistence charge payable to the EA.[390] The subsistence charge is an annual fee charged by the EA used to recover the costs incurred through ongoing regulation.

iii) Compliance Classification Scheme

The Compliance Classification Scheme (CCS) is a compliance tool used to classify offences for non-compliance with permit conditions. The scheme categorises non-compliance based on the potential of the facility to cause environmental damage. The different categories of non-compliance are:

- Category 1 – likely to lead to a major pollution
- Category 2 – likely to lead to significant pollution
- Category 3 - likely to lead to some (minor) pollution
- Category 4 – no or negligible impact

For example, a CCS category 1 would indicate non-compliance with a condition that, if classified as an incident, would have the potential to have a major environmental impact. Similarly, a CCS category 2 would indicate non-compliance with a condition that, if classified as an incident, would have the potential to have a significant environmental impact. As specified in section *2.1.3 iv) public interest factors* (above), Category 1 or 2 incidents are more likely to result in a prosecution, formal caution, or Variable Monetary Penalty.[391] [392]

iv) Compliance Assessment Plans (CAPs)

CAPs are used for planning compliance assessment work. They set out specific objectives along with the Environment Agency resources assigned to each of the compliance activities (including

[387] For further information on the Environment Agency's approach to monitoring emissions, see http://www.environment-agency.gov.uk/business/regulation/31829.aspx

[388] Environment Agency, Environmental Permitting Regulations Operational Risk Appraisal Scheme (Opra for EPR); Opra for EPR version 3.5 Annex A, Opra scheme for installations, April 2010 http://www.environment-agency.gov.uk/pdf/GEHO0410BSFB-e-e.pdf

[389] See: Opra for EPR version 3.5 Annex A, Opra scheme for installations, page 3

[390] Effective Inspection and enforcement: Implementing the Hampton vision in the Environment Agency, page 16

[391] Currently the only offence to which Civil Sanctions may applicable to IPPC installations is a stop notice issued pursuant to Section 46 of the Regulatory Sanctions and Enforcement Act 2008

[392] Environment Agency, Enforcement and Sanctions Guidance, page 12

inspections and audits). Sector CAPs contain objectives relevant for a particular industry sector and set out the proportion of effort that should be directed to each of the five generic compliance activities.[393]

c) Local Authority Approach

It is not possible here to provide details of the inspection approach adopted by each local authority. However, DEFRA has published general guidance in respect of Local Authority Integrated Pollution Prevention and Control (LA-IPPC) for (A2) installations and Local authority Pollution Prevention and Control (LAPPC) for Part B processes. This includes guidance on when and how permit conditions should be reviewed, as well as the requirements for inspection, monitoring and reporting.[394] As with the Environment Agency, there are risk-based inspection methodologies which should be applied by local authorities.[395] These include assessing each installation against specified criteria, which falls into two categories: i) Environmental impact appraisal and ii) Operator performance appraisal.[396] Both categories are evaluated by scoring the process against a number of different components, which are listed in the relevant methodology. The four main steps involved in the methods are:

STEP 1: desk-based scoring of processes
STEP 2: use of score sheets during inspection visits
STEP 3: use of scoring to determine regulatory effort and charges
STEP 4: review scores on a regular basis

The guidance states that scores for each process should be reviewed on a regular basis, and at least annually. In particular, it advises that scores should be reviewed following visits, any changes to the permit, receipt of complaints, or when enforcement action is taken. Under each method, installations are rated as 'high' 'medium' or 'low' risk. The required minimum required levels of inspection are attributed according to the risk, reflecting the regulatory effort involved. ' Regulatory effort' refers to the full range of activities needed to regulate the process: not just inspection, but time spent at the office preparing for inspections, writing reports and reviewing data supplied by operators.

2.2.3 The inspectors' powers

The main powers of inspectors are primarily determined by two pieces of legislation, the Environment Act 1995 and The Environmental Damage (Prevention and Remediation) Regulations 2009. Sections 108 and Regulation 31 respectively provide the following powers:

An authorised officer, for the purpose of:

- Determining whether and how any power of duty conferred on the Environment Agency should be exercised of performed; or
- Exercising any such power or duty; or
- Ascertaining whether any pollution control provision is being or has been complied with,

May carry out the following:

- enter premises with other officers and equipment if need be by force;
- Make necessary examinations and investigations, and direct that premises or property remain undisturbed for that purpose;
- Take measurements, photographs, recordings and samples;

[393] National Audit Office, Effective Inspection and enforcement: Implementing the Hampton vision in the Environment Agency, page 29
[394] DEFRA General Guidance Manual on Policy and Procedures for A2 and B Installations http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm
[395] The methods can be found at http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/fees-risk/index.htm
[396] Operator performance appraisal applies to all sectors. It should be noted however that several sectors have additional sector-specific risk tests which apply.

- Require the giving or production of information relevant to any examination or investigation;
- Require another to give such facilities or assistance as are within that persons control or responsibility.
- Test, dismantle or detain items likely to cause pollution or harm to health.

Section 109 Environment Act 1995 permits an authorised officer acting under Section 108 to seize and render harmless items causing imminent danger of serious pollution or serious harm to health.

Section 110 Environment Act 1995 states that any person obstructing an authorised officer in the exercise or performance of his powers or duties or who fails to comply with any requirements of section 108 of the Environment Act 1995 or fails to provide facilities or assistance or information or prevents any other person appearing before an authorised officer or answering a question to which an authorised person has required an answer, commits an offence.[397]

The Regulators' enforcement powers upon inspection are set out above in *Section 1.5* above. Under Part III of the EPA 1990 the local authority also has a duty to inspect its area from time to time to detect any statutory nuisances and to take such steps as are reasonably practicable to investigate any complaint of a statutory nuisance made by a person living within its area[398] (see also *Section 1.6* above). Where the local authority is satisfied of the existence or of the likely occurrence or recurrence of a statutory nuisance it must generally serve an abatement notice in accordance with section 80(2) of the EPA 1990. A failure to comply with an abatement notice is a criminal offence (Section 80(4)) and may result in court proceedings. However, Section 79(10) EPA 1990 specifies the particular circumstances in which the Secretary of State or Welsh Ministers' consent is required before a local authority can initiate summary proceedings. These include:

- smoke emitted from premises so as to be prejudicial to health or a nuisance (Section79(1)(b));
- any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance (Section79(1)(d));
- any accumulation or deposit which is prejudicial to health or a nuisance (Section 79(1)(e));
- artificial light emitted from premises so as to be prejudicial to health or a nuisance (Section79(1)(fb)); or
- noise emitted from premises so as to be prejudicial to health or a nuisance (Section79(1)(g));

The reason for the consent requirement under section 79(10) is to avoid 'double jeopardy' double jeopardy for operators, where they may already be subject to criminal proceedings under the EP Regulations. Court proceedings relating to activities not covered by the EP Regulations may be taken under the statutory nuisance provisions without such consent.[399]

2.3 Appeal against the administrative decision

2.3.1 By the operator

Under regulation 31 of the EP Regulations, a person whose application is refused or who is aggrieved by a decision to impose an environmental permit condition or on whom an enforcement notice, revocation notice, suspension notice, prohibition notice is served, can appeal. In most cases, this will be the operator, i.e. the person (natural or legal) who has control over the regulated facility (Regulation 7). However, in the case of a prohibition notice, will be the person (natural or legal) on whom the notice is served. Pursuant to Schedule 6 of the EP Regulations, the time limit for making an appeal for a refusal is not later than six months from the date of refusal or deemed refusal to grant a permit. In respect of an enforcement notice, a regulator-initiated variation or a suspension notice, the appeal

[397] Environment Agency Form LPR08, Notice of Powers and Rights
[398] Environmental Protection Act 1990 (c.43) section 79(1)
[399] DEFRA: Core Environmental Permitting guidance (v 3.1) - updated March 2010. Contains guidance for those operating, regulating or interested in facilities that are covered by the Environmental Permitting (England and Wales) Regulations 2010

dead-line is no later than 2 months after the date of the variation or notice. In relation to a prohibition notice, the time limit is no later than 21 days after the date of the notice. For appeals against a revocation notice, the time limit is any time before the revocation notice takes effect.[400]

Under regulation 31(9) and (10) of the EP Regulations, an appeal does not have the effect of suspending a decision or notice, except in the case of a revocation (in which case the notice does not take effect until the final determination or the withdrawal of the appeal). If an appeal is made the operator is required to state the grounds, i.e. they must justify why they served the notice.[401]

Appeals are normally made to the Planning Inspectorate. However, an appeal against the service of a stop notice under the Regulatory Enforcement and Sanctions Act 2008 (for a breach of 33(1) of the Environmental Protection Act 1990), or refusal to issue a Completion Certificate under such a notice are made to the First-tier Tribunal, which hears appeals in respect of civil sanctions.[402] As already noted, this is currently the only potential sanction applicable to IPPC installations. Stop notices (as well as any of the other civil sanctions under RESA 2008) are not currently available for breaches of the EP Regulations 2010.

2.3.2 By a person other than the operator

As specified in *Section 2.3.1* above the right of appeal is limited to persons directly affected by decisions or notices (as set out in), third parties (including individuals and NGO's) may challenge the decision of a regulator by way of judicial review. Judicial review is the procedure by which a party can seek to challenge the decision, action or failure to act of a public body such as a government department or a local authority or other body exercising a public law function.[403] The time limit for judicial review is not later than three months after the grounds upon which the claim is based first arose.[404] An example of a judicial review claim would be on the alleged procedural unfairness by the regulatory authority leading to the grant of a permit.[405] Judicial review proceedings are not normally allowed where the claimant has a statutory right of appeal (as in the case of a variation, enforcement, suspension and revocation notices under the Environmental Permitting (England and Wales) Regulations 2010). In such cases the claimant would have to show that the regulator had acted beyond its powers or in a way that no properly informed regulator would have acted.[406]

3. Judicial procedure (if relevant-with a focus on criminal sanctions)

3.3 General information

Criminal offences relevant to the IPPC Directive are set out in regulation 38 of the EP Regulations and section 33 of the Environmental Protection Act 1990. As with administrative sanctions, the way in which these provisions are applied and the factors which regulators must take into account when deciding whether or not to prosecute is determined by various guidance documents including DEFRA guidance,[407] the Regulators' Compliance Code,[408] the Cabinet Office Enforcement Concordat[409] and

[400] The Environmental Permitting (England and Wales) Regulations 2010, Schedule 6, paragraph 3
[401] The Environmental Permitting (England and Wales) Regulations 2010, Schedule 6, paragraph 2(2)(a)
[402] Environment Agency, Regulatory Guidance Series number 11, page 12. For grounds of appeal for RES sanctions, see Enforcement and Sanction Guidance, Annex 3, point 3.4
[403] http://www.hmcourts-service.gov.uk/cms/1220.htm#two
[404] Civil Procedure Rules, Part 54.5
[405] R (Edwards) v Environment Agency [2006] EWCA Civ 174
[406] Regulatory Guidance Series number 11, point 3.6
[407] DEFRA: Core Environmental Permitting guidance (v 3.1) - updated March 2010. Contains guidance for those operating, regulating or interested in facilities that are covered by the Environmental Permitting (England and Wales) Regulations 2010 SI 2010 No.675 (as amended) ('the Regulations'). For local authority-regulated facilities, the General Guidance Manual on policy and procedure can be found at http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm

the Environment Agency's own guidance incorporating its outcome-based approach (outlined in section 2.1 above).[410] In addition to these documents, regulators are required to take account of the Code for Crown Prosecutors[411] and the Attorney General's Guidelines on the Acceptance of Pleas and the Prosecutor's Role in the Sentencing Exercise.[412]

3.1.1 Criminal offences

Regulation 38 of the EP Regulations specifies a range of criminal offences for non-compliance with the Regulations. The most relevant offences to the IPPC Directive are:

- Contravention of regulation 12(1) i.e. to operate a regulated facility or to knowingly cause or knowingly permit a water discharge activity or groundwater activity except under and to the extent authorised by an environmental permit (Regulation 38(1));
- Failure to comply with or to contravene an environmental permit condition (Regulation 38(2));
- Failure to comply with the requirements of an enforcement notice, a prohibition notice or a suspension notice (Regulation 38 (3));
- Failure to comply with a notice under regulation 60(1) requiring the provision of information, without reasonable excuse, or to intentionally or recklessly make a false or misleading statement (Regulation 38 (4));

3.1.2 Additional (miscellaneous) criminal offences and related measures

- To deposit, knowingly cause or knowingly permit the deposit of controlled waste (including extractive waste) unless the deposit is covered by and in accordance with an environmental permit or exemption (Section 33(1)(a) Environmental Protection Act 1990);
- To submit waste (not including extractive waste) to a disposal or recovery operation in or on land or by mobile plant or to knowingly cause or knowingly permit that activity unless that operation is carried out in accordance with an environmental permit (Section 33(1)(b) Environmental Protection Act 1990);
- To treat, keep or dispose of waste (including extractive waste) in a manner likely to cause pollution of the environment or harm to human health, whether or not the operation is carried out in accordance with an environmental permit (Section 33(1)(c) Environmental Protection Act 1990);
- Pursuant to Regulation 44 of the EP Regulations, where a person is convicted for an offence for operating without or other than in accordance with a permit, or for failing to comply with a notice under regulation 38(3),[413] the regulator can apply to the court for an order requiring the person to take steps to remedy the matter.
- Injunction (Regulation 42) – to restrain any criminal act, particularly where a rapid response is required; and
- Court Order (Regulation 42) to either stop an activity or to carry out a particular activity. If the regulator considers that proceedings for a breach of notice under regulation 38(3) would afford an ineffectual remedy, it may take proceedings in the High Court in order to secure compliance with a notice.[414]

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[408] Statutory Code of Practice for Regulators, Department for Business Enterprise and Regulatory Reform, 17 December 2007 – This document incorporates the Hampton principles of effective inspection and enforcement outlined at section 2.2.

[409] Enforcement Concordat in 1998 //www.berr.gov.uk/bre/inspection-enforcement/implementing-principles/regulatory-compliance-code/enforcement/page46822.html

[410] Environment Agency's Enforcement and Sanctions Guidance, page 7

[411] The Code for Crown Prosecutors, February 2001. Available at http://www.cps.gov.uk/publications/docs/code2010english.pdf

[412] http://www.attorneygeneral.gov.uk/Publications/Documents/acceptance_of_pleas_guidance.doc.pdf

[413] Including an enforcement notice, prohibition notice and suspension notice, Regulation 33(3) of the EP Regulations 2010

[414] Including an enforcement notice, prohibition notice and suspension notice, Regulation 33(3) of the EP Regulations 2010

3.1.3 Criminal sanctions

Pursuant to regulation 38(1) of the Regulations, criminal sanctions are not restricted to the operator, but may be brought against any person (natural or legal) who commits an offence. The regulator may consider two potential criminal sanctions for IPPC-related offences:

i) a caution

A caution is not a criminal conviction but it forms part of an offender's criminal record and may be cited in court if further offences are committed. Formal cautions are intended to be a deterrent and according to the Environment Agency are considered where, although a prosecution could be initiated, other factors mitigate against this. Where a formal caution is not accepted, the EA will normally prosecute for the original offence.[415] Where a formal caution is used, the 'Full Code test' as required under the Code for Crown Prosecutors (see next paragraph below) must be considered.

ii) a prosecution

The second sanction applicable for IPPC offences is a prosecution. When considering prosecution, regulators must have regard to the Code for Crown Prosecutors ('the Code'). The Code provides guidance on the general principles to be applied when considering prosecutions. Where the regulator decides that a criminal sanction is appropriate it must assess the case in accordance with the requirements of the Code before commencing a prosecution. The Full Code Test has two stages: (i) the evidential stage; followed by (ii) the public interest stage.

For the evidential stage, prosecutors must be satisfied that there is sufficient evidence to provide a realistic prospect of conviction against each suspect on each charge. This will include considering the reliability and admissibility of the evidence.[416] They must also consider what the defence case may be, and how it is likely to affect the prospects of conviction. A case which does not pass the evidential stage must not proceed, no matter how serious or sensitive it may be. Where there is sufficient evidence to justify a prosecution or to offer an out-of-court disposal, prosecutors must go on to consider the second stage, i.e. whether a prosecution is required in the public interest. A number of factors will make a prosecution more likely, for example where a conviction is likely to result in a significant sentence, and where the offence was committed in order to facilitate more serious offending.[417]

Based on these factors as well as its own public interest factors *(see section 2.1 above),*[418] the Environment Agency will make a decision as to whether a prosecution is an appropriate response or whether an alternative to prosecution may be more appropriate. This assessment will include a consideration of factors set out by DEFRA, including those which will tend to suggest that prosecution is the proportionate action (*see Annex II hereto*).

3.1.4 Criminal procedure

Criminal offences for IPPC-related breaches in the UK are divided into two types: those on 'summary conviction' " or on 'conviction on indictment' depending on the seriousness of the offence (summary offences being the less serious of the two). All criminal cases will begin in the Magistrates' courts. If a defendant pleads not guilty to the charges the case will proceed to trial and may transfer to the Crown

[415] Environment Agency Enforcement and Sanctions Guidance, page 7
[416] Code for Crown Prosecutors, pages 7-9
[417] Code for Crown Prosecutors, pages 10-12
[418] The Environment Agency's guidance also sets out the public interest factors which it will take into account Environment Agency's Enforcement and Sanctions Guidance, page 12;

Court. Over 95 per cent of all criminal cases are dealt with in the magistrates' court and the vast majority of those will be completed there.[419]

Upon conviction, the court may also make additional orders such as compensation or an order to disqualify directors, confiscate assets, forfeit relevant equipment, or require remediation of the damage. Under 11.4 of the Code for Crown Prosecutors, it is the duty of the prosecutor to apply for such orders and compensation.

3.4 Possibilities of appeal

i) Magistrates Court

If found guilty after a trial, the person convicted may appeal to the Crown Court against the conviction. If the person pleaded guilty and was sentenced in the magistrates' court, they are not able to appeal against the conviction, but they can still appeal against the length or nature of the sentence imposed. A notice to appeal against the conviction or sentence must be served within 21 days.

ii) Crown Court

Upon conviction in the Crown Court, a notice of appeal must be given to the criminal division of the Court of Appeal within 28 days of the decision. An appeal can be against conviction or sentence but, unlike appeals from the Magistrates' Court to the Crown Court, there is no automatic right to appeal save for in two limited circumstances:

- if the sole ground(s) for the appeal involve(s) a question of law only
- in exceptional cases, the trial judge in the Crown Court may certify that the case is fit for appeal.

4. Synergies between administrative and criminal procedures

4.1 Criminal sanctions v administrative measures

The UK legislation does not prevent regulatory authorities from applying administrative enforcement measures and criminal sanctions in conjunction. On the contrary, the legislation provides for the use of both measures, while regulatory guidance advises the use of either and/or both where it is considered proportionate under the circumstances. Indeed, in its approach to 'better regulation' the Environment Agency aims to apply the most proportionate response to instances of non-compliance. It also applies its own 'outcome-focused' procedure and guidance, which it uses to determine the sanctions it will apply with reference to the outcome to be achieved. This includes the use of administrative measures with the option to resort to criminal prosecution where operators have breached their permit conditions or where administrative procedures are not complied with. The primary difference between the two is that administrative measures may be applied regardless of whether a crime has been committed, while criminal prosecution requires the Full Code Test to be satisfied before proceeding.

4.2 Criminal v Civil Sanctions

In general, criminal proceedings may not be taken where a civil sanction has been served pursuant to The Environmental Civil Sanctions Order & Regulations 2010. Exceptions to this are where:

[419] Judiciary of England and Wales website: http://www.judiciary.gov.uk/you-and-the-judiciary/going-to-court/magistrates-court

- A restoration notice, compliance notice or enforcement undertaking is used without the addition of a VMP and the person fails to comply with the notice or undertaking. In this case regulators can prosecute for the original offence.

- A stop notice is served; as failure to comply with a stop notice is a criminal offence in itself.[420]

The following case illustrates the approach taken by the courts in relation to IPPC related offences and the factors taken into account when determining sentences:

Example of criminal sanction

R v Cemex Cement Limited [2007] [421]

R v Cemex was an appeal case brought under the previous Permitting Pollution and Control regime, Nevertheless, it illustrate the way in which cases involving pollution from industrial installations have been dealt by the courts. In this case the Court of Appeal significantly reduced the fine imposed by the Magistrates Court from £400,000 to £50,000. Both the prosecution and defence in the case were content for the matter to be dealt with by the magistrates. However the magistrates decided that their powers of sentence (limited in the case of a fine to £20,000) were inadequate and they committed the case to the Crown Court for sentence. The Crown Court imposed a fine of £400,000 and ordered Cemex to pay the prosecution costs £12,429.14. Cemex appealed.

Offence
A large amount of potentially hazardous dust was released from a kiln as a result of it not being properly maintained. The Appellant ('Cemex') pleaded guilty to an offence under regulation 32(1)(b) of the (then) Pollution Prevention Control Regulations 2000, for failing to comply with a condition in the permit which stated that "all plant equipment and technical means used in operating the permitted installation shall be maintained in good operating condition".

Facts
The offence came to light when a member of the public saw dust coming out of the external door intermittently. He reported the matter to the Environment Agency (EA). The EA informed Cemex about the complaint. Cemex inspected the door and noticed damage. They made a temporary repair but notified those responsible for carrying out maintenance work that the door required urgent repair. The repair was fully carried out by contractors the following day. As a result, dust was allowed to escape, which the prevailing winds dispersed over a wide area. When that dust settled it caused a sticky substance to be found on cars and structures.

The judge noted that despite the proximity of the cement works and a nearby housing estate (approximately 100 yards), noone appeared to have been physically harmed by the exposure to the dust released, and twelve months after the incident there was no report of adverse health consequences.

However, the judge observed that there was no or no adequate record keeping of inspections. He described this situation as 'simply not good enough' and referred to 'a sloppy attitude' . He called it sloppy in part because there had been previous warnings issued to Cemex, or to those from whom Cemex had acquired the works. These had not resulted in any criminal prosecutions, and the judge noted that Cemex had no convictions recorded against it. In this case the judge did accept that Cemex had taken steps to remedy the matter and had not 'sat on their hands'.
The judge was especially critical of the fact that the kiln had been stopped before the dust emissions had been reported and then later restarted. He regarded the following as aggravating features: i) that there was a delay in the repair for the period already noted, ii) that when the repair was first done it was imperfect and iii) that the kiln was restarted without the door having been properly repaired. The Recorder stated that in his view it was a recipe for disaster and would have the inevitable consequence that there would be an emission of dust, if the kiln was restarted at a time when the door was an imperfect fit as occurred.

[420] See Civil sanctions for environmental offences, The Environmental Civil Sanctions Order & Regulations 2010, Guidance to regulators in England on how the civil sanctions should be applied, and draft guidance for Wales, p 10
[421] R v Cemex Cement Limited [2007] EWCA Crim 1759

Appeal

The Grounds of Appeal were that the sentence handed down in the Crown Court was wrong in principle and manifestly excessive. The submission that the sentence was wrong in principle was advanced on the footing that it was based on a serious misinterpretation of the evidence. The errors alleged were as to the quantity of dust emitted from the defective door (as opposed to dust lawfully emitted from the chimney stack), the risk that the dust presented to health of the exposed population and the extent to which the dust was toxic or hazardous. The Appeal Court rejected the suggestion that the Crown Court judge's sentencing approach had any erroneous basis of fact, whether as to the source and quantity of the emissions, or as to the adverse risk or adverse consequences to the health of those who might come into contact with the dust.

The submission that the sentence was manifestly excessive was advanced on the basis that the judge had failed to apply the principles in *R v Howe.*[422]

The case of R v Howe

The case of Howe concerned sentencing under the Health and Safety at Work Act 1974 (the 1974 Act) which the Court of Appeal considered to be of assistance in cases of environmental pollution. In that case an accident had occurred and a man was electrocuted. The premises were those of a small business. The appellant had been fined £48,000 and ordered to pay £7,500 costs in respect of four offences under the 1974 Act and related regulations. The company had failed to keep its electrical systems in a safe condition. The Appeal Court in *R v Howe* held that the Judge had given inadequate weight to the financial position of the appellant. The Appeal Court reduced the fine by £15,000.

The judgment in R v Howe highlighted the following factors which should be taken into account when determining the sentence:

- *In assessing the gravity of the breach it is often helpful to look at how far short of the appropriate standard the defendant fell in failing to meet the reasonably practicable test.*
- *Next, it is often a matter of chance whether death or serious injury results from even a serious breach. Generally where death is the consequence of a criminal act it is regarded as an aggravating feature of the offence. The penalty should reflect public disquiet at the unnecessary loss of life.*
- *Financial profit can often be made at the expense of proper action to protect employees and the public. Cost cutting is a crucial tool in achieving a competitive edge. A deliberate breach of the health and safety legislation with a view to profit seriously aggravates the offence.*
- *Other matters that may be relevant to sentence are the degree of risk and extent of the danger created by the offence; the extent of the breach or breaches, for example whether it was an isolated incident or continued over a period and, importantly, the defendant's resources and the effect of the fine on its business.*
- ***Particular aggravating features** will include (1) a failure to heed warnings and (2) where the defendant has deliberately profited financially from a failure to take necessary health and safety steps or specifically run a risk to save money.*
- ***Particular mitigating features** will include (1) prompt admission of responsibility and a timely plea of guilty, (2) steps to remedy deficiencies after they are drawn to the defendant's attention and (3) a good safety record.*
- *Any fine should reflect not only the gravity of the offence but also the means of the offender, and this applies just as much to corporate defendants as to any other (see s 18(3) of the Criminal Justice Act 1991)*

Cemex Case – Significant features:

The Appeal Court in R v Cemex accepted that none of the aggravating features expressly mentioned in *Howe* were present, while all of the mitigating factors referred to in that case were present. While the Appeal Court accepted that the factors which the judge had identified as aggravating were present, they highlighted the significant features which the judge had failed to take into account:

There was no evidence that Cemex decided to put profit before ensuring appropriate environmental controls.

The failure was not in the absence of a proper system, but in properly carrying out the system that there was.

Cemex had completed the temporary repair by 2.45 pm on the day that the EA notified it, and the full repair by about a day later.

Much of the dust that escaped on the day the silo was inspected and the day it was repaired came lawfully

[422] *R v Howe* [1999] 2 All ER 249

from the chimney stack.
There were a limited number of complaints from the public, and no complaints of ill health or damage to property. The estimated quantity of additional exposure amount to 0.25% of the annual PM10 exposure.
Cemex cleaned up the dust deposits the following week and reviewed and tightened its systems.
Cemex co-operated with the EA, tendered a prompt plea and an apology to members of the community who had been affected. It had a good record.

Judgment
The Appeal Court stated that there was no question of the Crown Court judge giving insufficient weight to the financial position of the Appellant. However, in summing up the case, the Appeal Court stated that the point was whether, in the absence of any fatality, any actual damage to health, or any deliberate failure by Cemex, and given the mitigating factors referred to, this was a case requiring a fine of £400,000. In its judgment, a fine of £400,000 was considered disproportionate. Having regard to the considerations in the cases referred to, it was held that the fine did not need to exceed £50,000. The sentence imposed by the Crown Court judge was therefore quashed and a fine of £50,000 substituted.

5. Conclusions

5.2 Conclusions

Proportionality

UK legislation provides regulators with a range of administrative sanctioning tools to ensure compliance with the relevant provisions of the IPPC Directive. This is complemented by guidance which aims to ensure that the regulators' approach is proportionate to the risks posed. Criminal penalties for non-compliance are intended to reflect the nature and gravity of the offence, by providing for convictions either 'summarily' or 'on conviction on indictment', with maximum sentences and fines for both types of offences. Both administrative measures and criminal penalties may therefore be deemed as fulfilling the criterion of proportionality. Furthermore, the introduction of civil sanctions for IPPC-related breaches is likely to provide a more proportionate response to non-compliance by giving regulators the power to impose civil sanctions for a range of environmental offences.

Effectiveness

The administrative tools available to regulators include a range of different notices which may be served on the operator, depending on the nature of the breach or level of harm posed to the environment. In certain cases, the regulator may determine the steps to be taken and the time period within which the operator must comply with a notice. Such notices include the power to remediate damage, suspend activities and vary permit conditions. The effectiveness of such notices can vary according to the nature of the offence and the outcome to be achieved. The ability to bring successful criminal proceedings is dependent primarily on the ability to meet the evidential and public interest criteria required, which, in addition to the time it can take to secure a conviction, has been viewed as a barrier to effectiveness. The introduction of civil sanctions is expected to improve effectiveness by providing regulators with additional powers which (it is hoped) will resolve many cases more quickly and effectively.

Dissuasiveness

Administrative measures including the suspension or restriction of activities, variation of permit conditions or even revocation of the permit may be viewed as being relatively stringent. However, it is arguable as to how dissuasive such administrative measures actually are, since they do not include the ability to impose any financial penalty. Criminal sanctions may be viewed as being considerably more stringent, due to the sizable fines and sentences which may be imposed.

5.2 Summary of case study responses

In order to illustrate how the UK legislation is applied in practice, two case studies were selected for the purposes of this study. With the assistance of the Environment Agency (EA), two cases were identified in which proceedings were brought by the EA for breach of the relevant IPPC legislation. The case studies were supplemented by telephone interviews with the relevant regulatory officers involved, both of whom were asked about the investigation and prosecution procedures carried out. They were also asked to comment on the extent to which the sanctions imposed were deemed proportionate, effective and dissuasive. The details of these cases studies are set out in Annex I.

Proportionality

Proportionality in both cases was deemed to be difficult to measure, in part due to the fact that the courts were responsible for the level of fines imposed. However, the levels of fines were believed to be proportionate when compared with those imposed by the Magistrates Court for similar offences. In one case, it was suggested that environmental offences do not receive the same level of attention as, for example, drink-driving offences. Furthermore, the Magistrate's Court deal with the majority of prosecutions, while only those breaches which are deemed significant or serious enough are referred to the Crown Court.

Effectiveness

In both case studies, the sanctions imposed were deemed to be effective. 'Effectiveness' was not necessarily measured in terms of the time taken to achieve compliance, but rather the extent to which the sanctions had achieved the required improvements, bringing the operator back into compliance with the regulations. In one of the cases, while the sanctions were viewed as being extremely effective, it was suggested that additional powers could improve effectiveness, for example, by allowing the EA to serve notices where the integrity of plant machinery was brought into question. However, to a large extent, the effectiveness of the sanctions available was characterised by the proportionality and dissuasiveness of those sanctions.

Dissuasiveness

In terms of dissuasiveness, both cases highlighted the deterrent effect of sanctions available to the EA. Furthermore, in both cases, it was suggested that the negative publicity associated with such sanctions contributed to their dissuasiveness. This was particularly evident where the cases had received press attention and the EA had received enquiries from other operators about the nature and reasons for the sanctions imposed. Such attention suggests that the sanctions imposed had achieved a wider deterrent effect than merely on influencing the behaviour of the operator.

Case studies

The first case study concerns an abattoir, with a continuing history of compliance issues, arising primarily from poor management and non-compliance with permit obligations. The site also has a history of odour problems with complaints received from local residents. One particularly serious incident resulted in the suspension of the operator's activities. On another occasion, activities were suspended for the operator's failure to have a document management system in place. Both administrative measures and criminal prosecution have been employed as sanctioning measures. The EA tried where possible to use administrative measures, including warning letters, site visits and administrative (enforcement) notices. However, in the case of significant or blatant breaches, the EA have resorted to criminal prosecution.

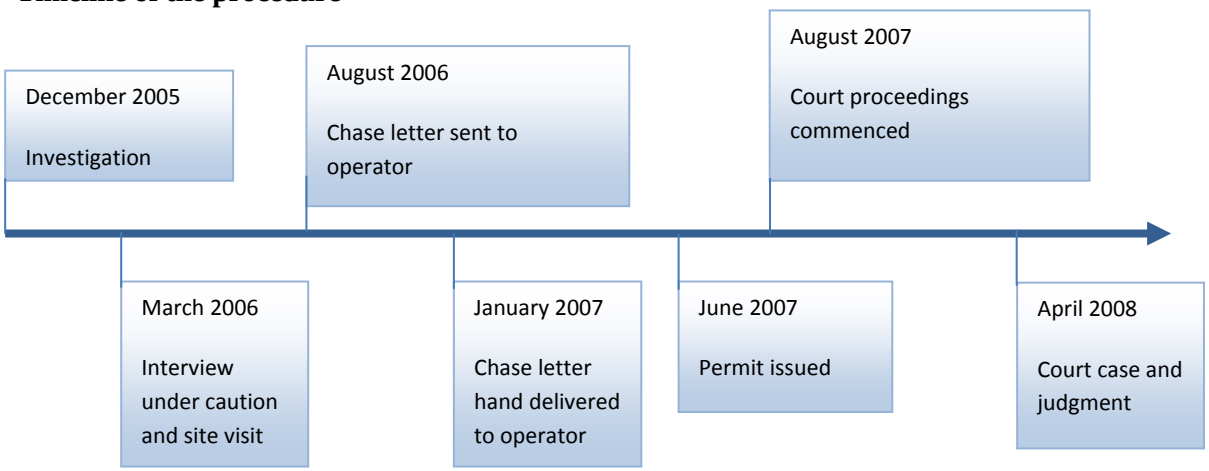
The second case study concerns a chemical manufacturing and processing facility prosecuted for breaching three of its environmental permit conditions. The three charges related to an emission of particulates from the facility in May 2009. The operator failed to notify the Environment Agency (EA) of the breach until a routine inspection by EA officers in October 2009. The case was brought to Leeds Magistrate's court in June 2010 and the operator pleaded guilty to three charges: exceeding its permitted limits, failing to notify the EA promptly of the incident and failing to maintain and implement its incident procedures. It was fined £15,000 plus costs of £2,567.88.

The sanctions imposed in both cases were believed by those interviewed to have been effective and dissuasive, on account of the fines imposed and their positive effects on operator compliance. Proportionality was considered more difficult to determine, partially due the fact that the Courts are responsible for setting the fines. However, in both cases, the fines were considered to be proportionate when compared with fines for similar types of offences.

Case study 1: West Scottish Lamb

Interviewee – Mr Jon Mellor
Organisation and position and: Environment Agency (EA), Regulatory Officer
Telephone number: + 00 44 1768 215738
Date of interview: 11/04/2011

Timeline of the procedure



Description of the background

The facility is an abattoir, covering approximately 2 acres on an industrial estate in Cumbria. It is designed for slaughtering of cows and sheep. This case study concerns 3 separate incidents.

Incident 1

From 31 August 2004, the legislation required abattoirs with a carcass production capacity of more than 50 tonnes per day to operate with a permit.[423] In March 2005, an EA officer visited the operator to enquire why they had not applied for a permit. The operator claimed that they were below the threshold of 50 tonnes and subsequently confirmed this in writing to the EA. In December 2005, the Local Authority received a planning application which appeared to raise doubt over the assertion that the site was below the threshold. The EA commenced investigations and with Meat Hygiene Service records established that the site had exceeded the thresholds under the permit.

Legislation applicable

Regulation 9(1) of the Pollution Prevention and Control (England & Wales) Regulations 2000 (now Regulation 12(1) the EP (England and Wales) Regulations 2010)). At the time of the offence, the maximum sanctions under the Regulations were (a) on summary conviction, a fine not exceeding £20,000 or to imprisonment for a term not exceeding six months or to both; (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding five years or to both.

The procedure

- *March 2006* - the EA interviewed representatives of the company under caution and advised them that they were operating illegally and needed a permit. Later that month EA officers visited the site to provide pre-application advice.
- *August 2006* - the EA wrote to the operator to express concerns about the apparent lack of progress.
- *September 2006* - the operator appointed a new consultant, and as a result it was necessary to restart 'pre-application' discussions.
- *January 2007* - the EA hand delivered a letter to the company director expressing concern about the lack of apparent progress with their permit application.
- *April 2007* - The EA received the operator's application but the incorrect fee was made
- *June 2007* - Outstanding fee received and permit issued. The permit contained an extensive 'improvement Programme' to address deficiencies on the site and to bring standards up to the Best Available Techniques (BAT).
- *August 2007* - Court proceedings were commenced. However, there were several delays in the proceedings, in part due to a request by the operator to seek a legal opinion, and due to holidays and lack of availability of the directors. The operator was prosecuted for failure to have an environmental permit in place between August 2004 and June 2007.
- *April 2008* - the case was heard before Carlisle Magistrates Court. The evidence presented against the operator included 'daily kill sheets' which were exhibited to a statement provided by MHS Principal Inspector who confirmed that they were an accurate record of the numbers of animals slaughtered. In addition, EA officers used statements and photographs to provide details of the installation and highlight the areas which were not at standard expected by a permitted installation. The Local Authority also provided statements detailing the history of odour complaints from the site and also the detailed site information which had been provided in support of the planning application. The defendant pleaded guilty and was fined £7,000 plus £2,358.15 in costs. The case received local media coverage.[424]

Incident 2

A separate incident occurred on 24 August 2009 when the operator failed to identify a blood tank had not been emptied and subsequently overfilled, destroying the charcoal filter which treated the displacement air from the tank. The tank over pressurised and when pressure was eventually released

[423] Schedule 1, Section 6.8 A1(b) of the Environmental Permitting (England and Wales) Regulations 2007
[424] http://www.newsandstar.co.uk/abattoir-fined-for-permit-breach-1.89504?referrerPath=home/2.1962

blood was sprayed across the yard and surrounding buildings. The spill was contained on the site but the odour was, according to the EA 'extremely objectionable' . The disruption to the neighbouring businesses and local residents was considerable and the Agency received a large number of complaints. The EA assessed the incident and gave it a Common Incident Compliance Scheme (CICS) rating of 2, on the basis that although the odour was noxious, no serious harm was caused to the environment. However, the EA considered that operation of the facility involved a risk of serious pollution, namely '*unabated emissions from the blood tank and associated pipe work causing annoyance outside the site*'.

Legislation applicable

The Environmental Permitting (England and Wales) Regulations 2007, Regulation 36 (Enforcement Notices), 38 (offences) and 39 (penalties). The maximum sanctions under the Regulations were: (a) on summary conviction, to a fine not exceeding £50,000 or imprisonment for a term not exceeding 12 months, or to both; or (b) on conviction on indictment, to a fine or imprisonment for a term not exceeding 5 years, or to both.

The procedure

As an immediate response to the incident, the EA issued an enforcement notice under Regulation 37 of the 2007 Regulations. The notice had the effect of suspending the permitted activity, i.e. the slaughtering of livestock in accordance with Schedule 1, Section 6.8 A1(b) of the Regulations. The notice also required detailed steps to be taken by the operator, specifying the deadlines by which these steps were to be completed. These included cleaning and inspecting the blood tank, demonstrating the integrity of the pipe work and agreeing timescales for an investigation into the incident. The impact of the notice was immediate. Works were duly completed by the operator before the suspension element of the notice came into effect, and the site was allowed to commence operations. EA officers attended the site on the day of the incident to verify satisfactory completion of the works.

Incident 3

In September 2009, (as part of the investigation into the incident on 24 August), the EA conducted an audit at the facility, indicating that the operator was not complying with a permit condition, namely to ensure that any emissions from activities were free from odour levels likely to cause annoyance outside the site, and to take appropriate measures to prevent or minimise that odour. In addition, the operator's paper work was found to be in extremely poor order. This was followed by a number of other substantiated odour incidents (though not as significant as the incident on 24 August). It eventually became apparent that the operator had disregarded the facility's Environmental Management System (EMS).

Legislation applicable

The Environmental Permitting (England and Wales) Regulations 2007, Regulation 36 (Enforcement Notices), Regulation 38 (offences) and Regulation 39 (penalties). The maximum sanctions under the Regulations were: (a) on summary conviction, to a fine not exceeding £50,000 or imprisonment for a term not exceeding 12 months, or to both; or (b) on conviction on indictment, to a fine or imprisonment for a term not exceeding 5 years, or to both.

The procedure

In October 2009 the EA issued an enforcement notice under Regulation 36 of the 2007 Regulations, on the basis that the operation of the facility involved a risk of serious pollution. Again, the notice specified the steps to be taken by the operator, which required, inter alia, removal of all animal by-products from the site, developing and implementing a management system, and defining the roles and

responsibilities of staff, as well as staff training. The operator employed consultants to oversee the running of the installation and re-establishment of the EMS. The EA ensured compliance with the notice by visiting the operator, during a follow up audit and agreement of a programme of staff training and ongoing supervision by the consultants. The incident was given a CICS rating of 2.

In July 2010 the case was brought before Carlisle Magistrates Court. Evidence collected by the Agency included photographs and statements from Agency Officers. Statements were also obtained from a number of staff who were directly involved with the clean-up and the events leading up to the incident. The Agency required the operator to identify all records and files / documented systems relating to the permit / environmental issues. This confirmed the documented management system was no longer in a functioning order. At court, the Magistrates were referred to the sentencing guidelines[425] and shown some recent press releases for similar offences. The operator was convicted of the following permit breaches by Carlisle Magistrates Court in respect of incidents 2 and 3:

1. 24.08.09 - Failure to comply with licence condition 3.1.1 (unauthorised point source emission), fined £2,500
2. 24.08.09 - Failure to comply with condition 3.4.1 (activities shall be free from odour levels likely to cause annoyance, and failure to take appropriate measures to minimise odour), fined £2,500
3. 30.09.09 - Failure to comply with condition 3.4.1 (as above), fined £2,500
4. 8.10.09 - Failure to comply with condition 3.4.1 (as above), fined £2,500
5. 14.10.09 – Failure to comply with condition 1.1 and 1.2 (activities not managed and operated in accordance with a management system, and no accident management plan maintained and implemented), fined £7,000

The case received media coverage from the local press.[426]

General comments on sanctions

Effectiveness of sanctions

The EA described the effect of sanctions in this case as '*enormous*'. The EA regulation officer stated that '*without question we would not have secured the improvements which have achieved without the use of the notices*'. However, they indicated that certain additional powers would have been useful, such as in a subsequent case where the operator had wanted to re-use a particular piece of plant machinery before carrying out integrity testing. The EA officer said ' *we did eventually persuade the operator to do the integrity testing and modify the tank before use but the issue went on for a number of weeks and took several days of regulatory effort. A notice would have helped the operator understand that the issue was not negotiable*'.

Proportionality

The EA officer stated that while it was difficult to judge proportionality, they believed that the fines imposed were generally similar to other environmental offences heard in Magistrates Courts in the area. The operator had been in court on a number of previous occasions, for prosecutions brought by other regulators, including the Meat Hygiene Service (MHS). In one case, the operator was fined £5,000 for animal cruelty offences,[427] and in another it was fined £7,000 for and in another for failing to operate within regulations relating to slaughtering of animals.[428] These incidents give an indication of the levels of fines achieved by other regulators at the site.

[425] http://sentencingcouncil.judiciary.gov.uk/docs/web_sgc_magistrates_guidelines_including_update_1__2__3_ web.pdf
[426] http://www.newsandstar.co.uk/news/carlisle-abattoir-firm-fined-over-stench-from-stale-blood-leak-1.737955?referrerPath=home/2.1962
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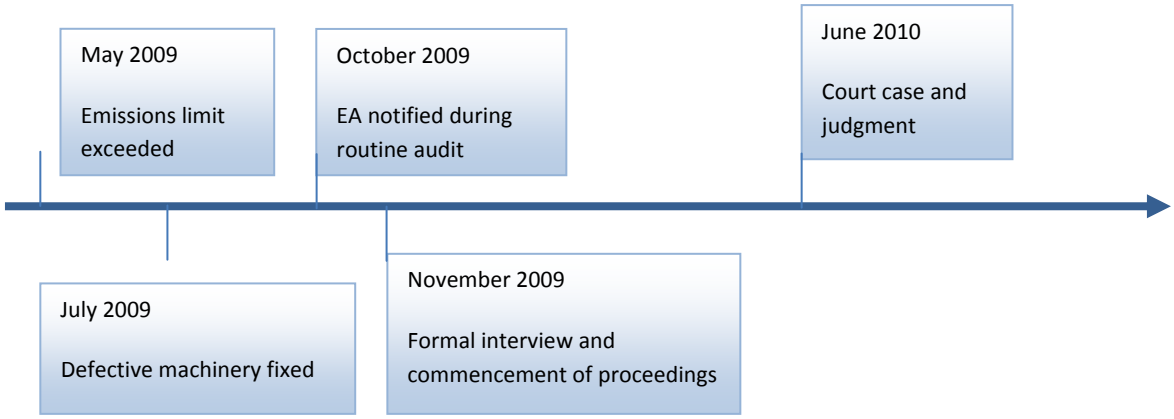
Dissuasiveness

While confirming that there were still some issues at the site, the officer believed that the sanctions imposed had achieved a deterrent effect on the operator, as evidenced by significant improvements in the operator's compliance. Furthermore, following the operator's conviction, the EA received enquiries from other operators about the nature and reasons for the sanctions imposed, suggesting that the sanctions had achieved a wider deterrent effect.

Case study 2: BRENNTAG

Interviewee – Ms Claire Wiles
Organisation and position: Environment Agency (EA), Regulatory Officer (Pollution Permission and Control)
Telephone number: + 00 44 1709 312762
Date of interview: 11/04/2011

Timeline of the procedure



Description of the background

The facility is a 3.5 acre industrial site in a mixed residential and commercial area on the outskirts of Leeds. Its activities include the manufacture, repackaging and distribution of organic chemicals, including alkalis, acids and inorganic chemicals. The permit for the facility was first issued in May 2005, and was subject to a minor variation in August 2006.

EA inspections are carried out at the site once or twice per year. In line with the site's environmental permit, external consultants are engaged by the operator to test their emissions from a wet scrubber on site. On 29 May 2009 the external consultants detected an elevated particulates release. This was reported to the operator on 5 June 2009 and traced to a defective item within the plant (a pump within a scrubber). The operator did not report this to the EA and continued to operate the plant from 5 June 2009 until the item of plant was repaired on 10 July 2009. During this period particulates (caused when zinc oxide is added to the manufacturing process) were released into the atmosphere when the plant was in use. It was brought to the attention of the EA during a routine part audit in October 2009. During that audit, the operator notified the EA that in May 2009 they had exceeded their permitted emissions of particulate matter under the permit.

Legislation applicable

This was a prosecution for a breach of environmental permit conditions, under Regulations 38 of the Environmental Permitting (England and Wales) Regulations 2007. The operator was charged with three separate offences under Regulation 38(1)(b) of the Environmental Permitting (England and Wales) Regulations 2007, namely:

i) exceeding the permitted limit of emissions to air of particulate matter from an emission point reference;

ii) failure to maintain and implement written procedures for investigating incidents and prompt implementation of appropriate actions in relation to the scrubber pump;

iii) Failure to notify the Environment Agency without delay of the detection of an emission of a substance which exceeds any limit in the permit.

The EA confirmed that at the time of the offence the maximum sanctions applicable under section 39 of the 2007 Regulations were (a) on summary conviction, to a fine not exceeding £50,000 or imprisonment for a term not exceeding 12 months, or to both; or (b) on conviction on indictment, to a fine or imprisonment for a term not exceeding 5 years, or to both. The operator was fined £15,000 (£5,000 for each offence) plus prosecution costs of £2,567.88.

The procedure

On discovering the breach, the case officer immediately ceased the audit and served on the operator a 'Notice of Powers and Rights - Police and Criminal Evidence Act 1984, Code B', formally notifying them that a suspected offence had been committed. The EA officer took copies of several reports including monitoring reports, a safety data sheet for Zinc Oxide, and an air monitoring summary Excel spreadsheet. A formal interview was conducted on the 23 November 2009 with the operator's UK Technical and Compliance Manager, authorised to speak on behalf of the company who admitted to the charges. The minimum criteria for prosecution is the '2 stage test', as outlined in the country detailed report. The evidence was deemed by the EA as sufficient to meet this test. Proceedings were dealt with in the Bradford Magistrates Court approximately 8 months after discovery of the breach by the EA.

In this case, prosecution was the first and only sanction considered. The operators had blatantly ignored the incident and had continued to operate the facility without notifying the EA. The impact of the increased concentration was deemed by the EA to be so low that no environmental harm was likely to have been caused, and therefore no specific tests were carried out. However, it was the EA's view that the operator's failure to comply with the permit conditions had posed a significant potential risk, due to the particulates generated which can be toxic to aquatic life. This was further aggravated by its failure to notify the EA.

Although no environmental damage was detected, the incident was assessed and given a score of 2 in accordance with the EA's Compliance Classification System (CCS), on the basis that the chemicals involved were potentially toxic. The factors taken into account in determining the seriousness of the offence included the quantity and type of discharge, the decision to continue operating when a fault was identified, an element of financial motivation, and the failure to report the incident to the Agency. The penalty was a matter for the Bradford Magistrates Court whose responsibility it is to set the level of the fine.

General comments on sanctions

Effectiveness

The fine imposed was viewed by the EA as efficient and effective for the following reasons:

- It was seen as a deterrent from future offending.
- The quantum (£15,000 in total) had an impact on the operator's finances.
- The EA produced a press release after conviction and the case attracted publicity in the area.

The press release was viewed by the EA as having a deterrent effect, primarily on the business itself rather than on other operators. Furthermore, the EA believed that the sanction had affected profitability. '*We don't consider the fine to be trivial and believe the operator would not want to pay out this sum of money again. We also expect that there has been damage to the company's reputation and brand image*'.

The effectiveness of the sanctions was further evidenced when the operator breached its ELVs on another two occasions. In both instances, the operator notified the EA of the breaches within 24 hours, ceasing processing operations immediately, until compliance was restored. The operator was given two weeks to comply and the EA officer visited to confirm compliance. A further breach occurred on 29/01/10, whereupon they restored compliance on 11/03/2010 and again on 21/10/2011 whereupon they restored compliance in February 2011.

£15,000 was viewed by the EA as a reasonable fine, considering the lack of any major impact on the environment. It was commented that one or more aggravating factors will tend to result in a higher fine, particularly where there is evidence of damage to the environment e.g. to fish and wildlife. Where a case is referred to the Crown Court, fine can be unlimited. However, it was suggested that such offences don't always get the attention they necessarily deserve, especially compared with other offences (e.g. drink-driving). Furthermore, breaches must be must be significant to be referred to the Crown Court. Generally, the range of sanctions is considered sufficient to deal with most offences.

Proportionality

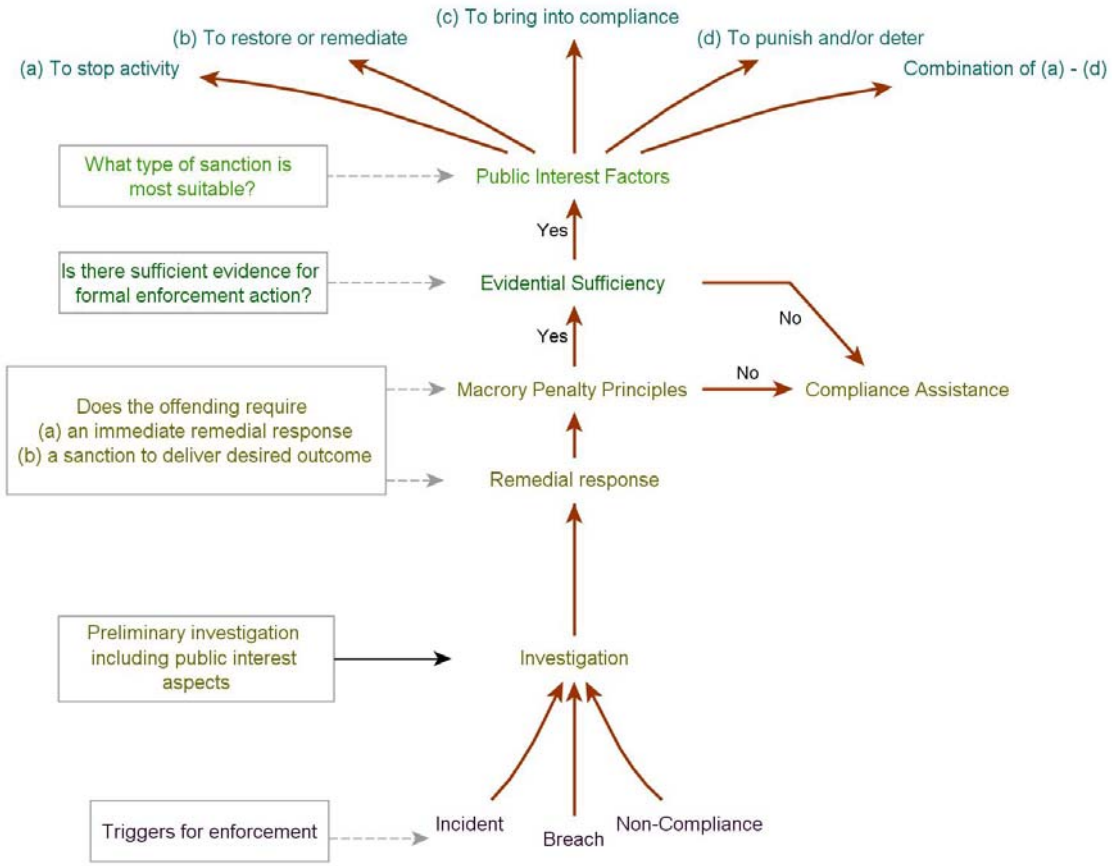
The EA officer believed the sanction to be proportionate, adding that it compared well to other cases. She could not comment on whether the fine was proportionate to company turnover. It was the court to make that decision and the EA was not sure how they calculated the fine.

Dissuasiveness

The EA believed that in this case the offences were not committed deliberately therefore the sanction was not considered to be a deterrent from offending per se. However, they did believe that the sanctions imposed would act as a deterrent to future decisions motivated by financial rather than environmental considerations (as the decision to continue operating was here). They added that the damage to the operator's reputation and image may have had a negative effect, although it was not possible to measure this impact. The officer confirmed that the EA had seen a change in the behaviour of the operator since the prosecution in that they had been notified without delay of further permit breaches. Furthermore, they believed that the sanction would serve to dissuade others from further offences of that nature. The EA officer added '*There is evidence of the dissuasive effect as we have seen a behavioural change in the Operator since the prosecution. It took around 8 months to secure the prosecution but it was worth the effort*'.

The Environment Agency's 'Sanctions decision tree'

Source: The Environment Agency, Enforcement and Sanctions Guidance[429]



[429] Enforcement and Sanctions Guidance, page 11

DEFRA Public interest factors in favour of prosecution[430]

Factors relating to	Factor tending to suggest that prosecution is appropriate
Offence	• long-term or continuing breach • significant deviation from legal requirement or permit conditions • operating without a licence or permit
Offender	• has committed an offence intentionally or with recklessness or negligence • has a history of non-compliance • has failed to comply with a previous civil sanction • is shown to be dishonest or deceiving • as failed to report non-compliance • has not cooperated with investigations • has failed to comply with restoration or other notice requirements • the offence involved obstruction • the incident was foreseeable • the offence has been committed with the consent, • connivance or neglect of senior officers of corporate body
Impact	• serious environmental impact or risk of impact, including impact on the local community • serious impact on compliant business, competitors undermined • the offence undermines the regulatory system
Possible wider consequences	• significant potential long-term effect • potential impact on the wider population

[430] Source: Civil sanctions for environmental offences, The Environmental Civil Sanctions Order & Regulations 2010, Guidance to regulators in England on how the civil sanctions should be applied, and draft guidance for Wales: http://www.defra.gov.uk/environment/policy/enforcement/pdf/defra-wag-guidance.pdf

Costing the Earth: Guidelines for Magistrates
7.2 Acid effluent into river

Legislation
The Environmental Permitting Regulations 2007 No. 3538 (EPR 2007)[431] provide that:

12 No person may operate a regulated facility except under and to the extent authorised by an environmental permit.

36(1) If the regulator considers that an operator has contravened, is contravening, or is likely to contravene an environmental permit condition, the regulator may serve a notice on him under this regulation (in these Regulations, an 'enforcement notice').

38(1) It is an offence for a person- (a) to contravene, or knowingly cause or knowingly permit the contravention of, regulation 12

Maximum penalty
39(1) A person guilty of an offence under regulation 38(1)(a), (b) or (c) is liable- (a) on summary conviction to a fine not exceeding £50,000 or imprisonment for a term not exceeding 12 months, or to both; or (b) on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both.

Facts
An engineering company, Tirnshap Engineering Ltd (TEL), is regulated by the Environment Agency (EA). It has an environmental permit which enables it to use certain chemicals. Its works are situated close to open marshland, which has been designated as a Site of Special Scientific Interest (SSSI). Effluent from the works after it has been treated is discharged lawfully to a nearby river.

The operations at the plant produce a strong acid effluent. That effluent flows via an underground drain into an interceptor pit. From there it is pumped to an effluent treatment plant for cleansing purposes before being released into the river. In February abnormally high acid levels were recorded in the drain which were at first attributed to leaks into the effluent system. Initial checks found nothing. However, later that month, TEL decided to institute a drain sampling exercise and consideration was given to possible leaks of acid from the process. Checks carried out on the outfall pipes revealed a problem. When the storm water drains were checked, liquid was observed entering through the brickwork. It was decided to flush the storm drain system with water to remove the acid contamination. The EA was informed of these moves. The following month, the EA was shown a video examination of the process drain, which indicated fractures in the pipe. TEL stated that acidic liquor from the effluent drain had leaked into the ground and from there into storm water drains and off the site. Consultants were then asked to determine the effects of this escape of acidic liquor from the system on the nearby marshland. Samples were taken. The results indicated that in the areas of open water in the marshland, which were affected by the acid spill, the invertebrate population had been either completely wiped out or very substantially reduced. The affected area would gradually regenerate but only after a lengthy period of several years. In the meantime, visiting bird life would be unlikely to return or roost at the site and the fish population similarly had been decimated.

TEL concluded that it was likely that a significant loss of acid had occurred since early February and it estimated a loss of about 17.5 tonnes of 100% proof hydrochloric acid. From a records inspection, the EA also calculated that there had been a significant loss of acidic scrubber liquor during the previous month. It was calculated that there was a total estimated loss of 39 tonnes of 100% proof hydrochloric acid.

[431] Repealed by the Environmental Permitting Regulations 2010 (EPR 2010) as amended.

The cause of the incident was the leaks in the process drain. The company accepted that acid had leaked from this drain via the surface drains into the marshland and that the leak was a breach of the conditions of its permit. On investigation, the EA also discovered that the drains had been examined in 2002 and had been found to be leaking at that time and to have structural damage. TEL, however, had decided that no remedial action was necessary. The company had failed to consider the implications of continued operation of the drains in their current state. It is highly likely that the acid had attacked the drains over a period of time owing to the fact that they were flooded. TEL was found guilty of three offences under Regulations 12 & 38 of the EPR 2007 in failing to abide by conditions in its permit in that:

• it failed to maintain in good operating condition all its plant equipment and technical means;
• it failed to operate the site in such a way as to prevent pollution of any surface or underground waters and so that there was no discharge of trade effluent to any underground strata; and
• it failed to use the best available techniques for rendering harmless any substance that might cause harm if released into any environmental medium.

Assessing seriousness
• TEL was aware of the problem several years ago but had taken no remedial action. If it had done so at that time it would have cost in the region of £20,000.

• The environmental impact has been considerable, with the marshland being gravely affected for a protracted period. TEL could be considered to have taken a risk in respect of its drainage systems so as to save costs.

• As soon as fully aware of the extent of the problem TEL spent £50,000 on rectifying its drainage system.

• The effluent had diffused and affected other water bodies. The discharge affected the nearby marshland, which is designated as a SSSI.

Questions
1. What is the most appropriate sentence for TEL?
2. Is the £50,000 spent on rectification a true mitigating feature, bearing in mind that the work should have been done several years before?

Judicial opinion
Acid effluent into river - The offences arise out of breach of permit conditions. The defects have been known to the company for many years. A total fine of £25,000 plus costs. Still not having done the works when the case came before the court would be an aggravating factor. The company should have done the works earlier. Completing them late in the day does not provide weighty mitigation.

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- Ministry of Justice website: http://www.justice.gov.uk/civil/procrules_fin/contents/parts/part54.htm
- Judiciary of England and Wales website http://www.judiciary.gov.uk
- Magistrates Court Sentencing Guidelines: http://www.sentencingcouncil.org.uk/docs/web_sgc_magistrates_guidelines_including_update_1__2__3_web.pdf
- Costing the Earth: guidance for sentencers, Magistrates Association, 2009 http://www.magistrates-association-temp.org.uk/dox/Costing%20the%20Earth%20for%20MA%20with%20cover.pdf

Miscellaneous articles and studies

- ENTEC, Assessment of the Implementation of the IPPC Directive in the UK, Final Report, January 2008 http://www.defra.gov.uk/environment/quality/pollution/ppc/background/documents/implementation-study.pdf
- Lord Justice Robert Cranworth The IPPC Directive: UK law and practice, EUFJE Stockholm conference 16 and 17 October 2009, UK National Report http://www.eufje.org/uploads/documentenbank/d80f7d0ea2629bd8dc4cbbe1076bc65d.pdf

CONVENTION ON ACCESS TO INFORMATION, PUBLIC PARTICIPATION IN DECISION-MAKING AND ACCESS TO JUSTICE IN ENVIRONMENTAL MATTERS

done at Aarhus, Denmark,
on 25 June 1998

The Parties to this Convention,

Recalling principle l of the Stockholm Declaration on the Human Environment,

Recalling also principle 10 of the Rio Declaration on Environment and Development,

Recalling further General Assembly resolutions 37/7 of 28 October 1982 on the World Charter for Nature and 45/94 of 14 December 1990 on the need to ensure a healthy environment for the well-being of individuals,

Recalling the European Charter on Environment and Health adopted at the First European Conference on Environment and Health of the World Health Organization in Frankfurt-am-Main, Germany, on 8 December 1989,

Affirming the need to protect, preserve and improve the state of the environment and to ensure sustainable and environmentally sound development,

Recognizing that adequate protection of the environment is essential to human well-being and the enjoyment of basic human rights, including the right to life itself,

Recognizing also that every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations,

Considering that, to be able to assert this right and observe this duty, citizens must have access to information, be entitled to participate in decision-making and have access to justice in environmental matters, and acknowledging in this regard that citizens may need assistance in order to exercise their rights,

Recognizing that, in the field of the environment, improved access to information and public participation in decision-making enhance the quality and the implementation of decisions, contribute to public awareness of environmental issues, give the public the opportunity to express its concerns and enable public authorities to take due account of such concerns,

Aiming thereby to further the accountability of and transparency in decision-making and to strengthen public support for decisions on the environment,

Recognizing the desirability of transparency in all branches of government and inviting legislative bodies to implement the principles of this Convention in their proceedings,

Recognizing also that the public needs to be aware of the procedures for participation in environmental decision-making, have free access to them and know how to use them,

Recognizing further the importance of the respective roles that individual citizens, non-governmental organizations and the private sector can play in environmental protection,

Desiring to promote environmental education to further the understanding of the environment and sustainable development and to encourage widespread public awareness of, and participation in, decisions affecting the environment and sustainable development,

Noting, in this context, the importance of making use of the media and of electronic or other, future forms of communication,

Recognizing the importance of fully integrating environmental considerations in governmental decision-making and the consequent need for public authorities to be in possession of accurate, comprehensive and up-to-date environmental information,

Acknowledging that public authorities hold environmental information in the public interest,

Concerned that effective judicial mechanisms should be accessible to the public, including organizations, so that its legitimate interests are protected and the law is enforced,

Noting the importance of adequate product information being provided to consumers to enable them to make informed environmental choices,

Recognizing the concern of the public about the deliberate release of genetically modified organisms into the environment and the need for increased transparency and greater public participation in decision-making in this field,

Convinced that the implementation of this Convention will contribute to strengthening democracy in the region of the United Nations Economic Commission for Europe (ECE),

Conscious of the role played in this respect by ECE and recalling, inter alia, the ECE Guidelines on Access to Environmental Information and Public Participation in Environmental Decision-making endorsed in the Ministerial Declaration adopted at the Third Ministerial Conference "Environment for Europe" in Sofia, Bulgaria, on 25 October 1995,

Bearing in mind the relevant provisions in the Convention on Environmental Impact Assessment in a Transboundary Context, done at Espoo, Finland, on 25 February 1991, and the Convention on the Transboundary Effects of Industrial Accidents and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, both done at Helsinki on 17 March 1992, and other regional conventions,

Conscious that the adoption of this Convention will have contributed to the further strengthening of the "Environment for Europe" process and to the results of the Fourth Ministerial Conference in Aarhus, Denmark, in June 1998,

Have agreed as follows:

Article 1

OBJECTIVE

In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention.

Article 2

DEFINITIONS

For the purposes of this Convention,

1. "Party" means, unless the text otherwise indicates, a Contracting Party to this Convention;

2. "Public authority" means:

(a) Government at national, regional and other level;

(b) Natural or legal persons performing public administrative functions under national law, including specific duties, activities or services in relation to the environment;

(c) Any other natural or legal persons having public responsibilities or functions, or providing public services, in relation to the environment, under the control of a body or person falling within subparagraphs (a) or (b) above;

(d) The institutions of any regional economic integration organization referred to in article 17 which is a Party to this Convention.

This definition does not include bodies or institutions acting in a judicial or legislative capacity;

3. "Environmental information" means any information in written, visual, aural, electronic or any other material form on:

(a) The state of elements of the environment, such as air and atmosphere, water, soil, land, landscape and natural sites, biological diversity and its components, including genetically modified organisms, and the interaction among these elements;

(b) Factors, such as substances, energy, noise and radiation, and activities or measures, including administrative measures, environmental agreements, policies, legislation, plans and programmes, affecting or likely to affect the elements of the environment within the scope of subparagraph (a) above, and cost-benefit and other economic analyses and assumptions used in environmental decision-making;

(c) The state of human health and safety, conditions of human life, cultural sites and built structures, inasmuch as they are or may be affected by the state of the elements of the environment or, through these elements, by the factors, activities or measures referred to in subparagraph (b) above;

4. "The public" means one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organizations or groups;

5. "The public concerned" means the public affected or likely to be affected by, or having an interest in, the environmental decision-making; for the purposes of this definition, non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.

Article 3

GENERAL PROVISIONS

1. Each Party shall take the necessary legislative, regulatory and other measures, including measures to achieve compatibility between the provisions implementing the information, public participation and access-to-justice provisions in this Convention, as well as proper enforcement measures, to establish and maintain a clear, transparent and consistent framework to implement the provisions of this Convention.

2. Each Party shall endeavour to ensure that officials and authorities assist and provide guidance to the public in seeking access to information, in facilitating participation in decision-making and in seeking access to justice in environmental matters.

3. Each Party shall promote environmental education and environmental awareness among the public, especially on how to obtain access to information, to participate in decision-making and to obtain access to justice in environmental matters.

4. Each Party shall provide for appropriate recognition of and support to associations, organizations or groups promoting environmental protection and ensure that its national legal system is consistent with this obligation.

5. The provisions of this Convention shall not affect the right of a Party to maintain or introduce measures providing for broader access to information, more extensive public participation in decision-making and wider access to justice in environmental matters than required by this Convention.

6. This Convention shall not require any derogation from existing rights of access to information, public participation in decision-making and access to justice in environmental matters.

7. Each Party shall promote the application of the principles of this Convention in international environmental decision-making processes and within the framework of international organizations in matters relating to the environment.

8. Each Party shall ensure that persons exercising their rights in conformity with the provisions of this Convention shall not be penalized, persecuted or harassed in any way for their involvement. This provision shall not affect the powers of national courts to award reasonable costs in judicial proceedings.

9. Within the scope of the relevant provisions of this Convention, the public shall have access to information, have the possibility to participate in decision-making and have access to justice in environmental matters without discrimination as to citizenship, nationality or domicile and, in the case of a legal person, without discrimination as to where it has its registered seat or an effective centre of its activities.

Article 4

ACCESS TO ENVIRONMENTAL INFORMATION

1. Each Party shall ensure that, subject to the following paragraphs of this article, public authorities, in response to a request for environmental information, make such information available to the public, within the framework of national legislation, including, where requested and subject to subparagraph (b) below, copies of the actual documentation containing or comprising such information:

(a) Without an interest having to be stated;

(b) In the form requested unless:

(i) It is reasonable for the public authority to make it available in another form, in which case reasons shall be given for making it available in that form; or

(ii) The information is already publicly available in another form.

2. The environmental information referred to in paragraph 1 above shall be made available as soon as possible and at the latest within one month after the request has been submitted, unless the volume and the complexity of the information justify an extension of this period up to two months after the request. The applicant shall be informed of any extension and of the reasons justifying it.

3. A request for environmental information may be refused if:

(a) The public authority to which the request is addressed does not hold the environmental information requested;

(b) The request is manifestly unreasonable or formulated in too general a manner; or

(c) The request concerns material in the course of completion or concerns internal communications of public authorities where such an exemption is provided for in national law or customary practice, taking into account the public interest served by disclosure.

4. A request for environmental information may be refused if the disclosure would adversely affect:

(a) The confidentiality of the proceedings of public authorities, where such confidentiality is provided for under national law;

(b) International relations, national defence or public security;

(c) The course of justice, the ability of a person to receive a fair trial or the ability of a public authority to conduct an enquiry of a criminal or disciplinary nature;

(d) The confidentiality of commercial and industrial information, where such confidentiality is protected by law in order to protect a legitimate economic interest. Within this framework, information on emissions which is relevant for the protection of the environment shall be disclosed;

(e) Intellectual property rights;

(f) The confidentiality of personal data and/or files relating to a natural person where that person has not consented to the disclosure of the information to the public, where such confidentiality is provided for in national law;

(g) The interests of a third party which has supplied the information

requested without that party being under or capable of being put under a legal obligation to do so, and where that party does not consent to the release of the material; or

(h) The environment to which the information relates, such as the breeding sites of rare species.

The aforementioned grounds for refusal shall be interpreted in a restrictive way, taking into account the public interest served by disclosure and taking into account whether the information requested relates to emissions into the environment.

5. Where a public authority does not hold the environmental information requested, this public authority shall, as promptly as possible, inform the applicant of the public authority to which it believes it is possible to apply for the information requested or transfer the request to that authority and inform the applicant accordingly.

6. Each Party shall ensure that, if information exempted from disclosure under paragraphs 3 (c) and 4 above can be separated out without prejudice to the confidentiality of the information exempted, public authorities make available the remainder of the environmental information that has been requested.

7. A refusal of a request shall be in writing if the request was in writing or the applicant so requests. A refusal shall state the reasons for the refusal and give information on access to the review procedure provided for in accordance with article 9. The refusal shall be made as soon as possible and at the latest within one month, unless the complexity of the information justifies an extension of this period up to two months after the request. The applicant shall be informed of any extension and of the reasons justifying it.

8. Each Party may allow its public authorities to make a charge for supplying information, but such charge shall not exceed a reasonable amount. Public authorities intending to make such a charge for supplying information shall make available to applicants a schedule of charges which may be levied, indicating the circumstances in which they may be levied or waived and when the supply of information is conditional on the advance payment of such a charge.

Article 5

COLLECTION AND DISSEMINATION OF ENVIRONMENTAL INFORMATION

1. Each Party shall ensure that:

(a) Public authorities possess and update environmental information which is relevant to their functions;

(b) Mandatory systems are established so that there is an adequate flow of information to public authorities about proposed and existing activities which may significantly affect the environment;

(c) In the event of any imminent threat to human health or the environment, whether caused by human activities or due to natural causes, all information which could enable the public to take measures to prevent or mitigate harm arising from the threat and is held by a public authority is disseminated immediately and without delay to members of the public who may be affected.

2. Each Party shall ensure that, within the framework of national legislation, the way in which public authorities make environmental information available to the public is transparent and that environmental information is effectively accessible, inter alia, by:

(a) Providing sufficient information to the public about the type and scope of environmental information held by the relevant public authorities, the basic terms and conditions under which such information is made available and accessible, and the process by which it can be obtained;

(b) Establishing and maintaining practical arrangements, such as:

(i) Publicly accessible lists, registers or files;

(ii) Requiring officials to support the public in seeking access to information under this Convention; and

(iii) The identification of points of contact; and

(c) Providing access to the environmental information contained in lists, registers or files as referred to in subparagraph (b) (i) above free of charge.

3. Each Party shall ensure that environmental information progressively becomes available in electronic databases which are easily accessible to the public through public telecommunications networks. Information accessible in this form should include:

(a) Reports on the state of the environment, as referred to in paragraph 4 below;

(b) Texts of legislation on or relating to the environment;

(c) As appropriate, policies, plans and programmes on or relating to the environment, and environmental agreements; and

(d) Other information, to the extent that the availability of such information in this form would facilitate the application of national law implementing this Convention,

provided that such information is already available in electronic form.

4. Each Party shall, at regular intervals not exceeding three or four years, publish and disseminate a national report on the state of the environment, including information on the quality of the environment and information on pressures on the environment.

5. Each Party shall take measures within the framework of its legislation for the purpose of disseminating, inter alia:

(a) Legislation and policy documents such as documents on strategies, policies, programmes and action plans relating to the environment, and progress reports on their implementation, prepared at various levels of government;

(b) International treaties, conventions and agreements on environmental issues; and

(c) Other significant international documents on environmental issues, as appropriate.

6. Each Party shall encourage operators whose activities have a significant impact on the environment to inform the public regularly of the environmental impact of their activities and products, where appropriate within the framework of voluntary eco-labelling or eco-auditing schemes or by other means.

7. Each Party shall:

(a) Publish the facts and analyses of facts which it considers relevant and important in framing major environmental policy proposals;

(b) Publish, or otherwise make accessible, available explanatory material on its dealings with the public in matters falling within the scope of this Convention; and

(c) Provide in an appropriate form information on the performance of public functions or the provision of public services relating to the environment by government at all levels.

8. Each Party shall develop mechanisms with a view to ensuring that sufficient product information is made available to the public in a manner which enables consumers to make informed environmental choices.

9. Each Party shall take steps to establish progressively, taking into account international processes where appropriate, a coherent, nationwide system of pollution inventories or registers on a structured, computerized and publicly accessible database compiled through standardized reporting. Such a system may include inputs, releases and transfers of a specified range of substances and products, including water, energy and resource use, from a specified range of activities to environmental media and to on-site and off-site treatment and disposal sites.

10. Nothing in this article may prejudice the right of Parties to refuse to disclose certain environmental information in accordance with article 4, paragraphs 3 and 4.

Article 6

PUBLIC PARTICIPATION IN DECISIONS ON SPECIFIC ACTIVITIES

1. Each Party:

(a) Shall apply the provisions of this article with respect to decisions on whether to permit proposed activities listed in annex I;

(b) Shall, in accordance with its national law, also apply the provisions of this article to decisions on proposed activities not listed in annex I which may have a significant effect on the environment. To this end, Parties shall determine whether such a proposed activity is subject to these provisions; and

(c) May decide, on a case-by-case basis if so provided under national law, not to apply the provisions of this article to proposed activities serving national defence purposes, if that Party deems that such application would have an adverse effect on these purposes.

2. The public concerned shall be informed, either by public notice or individually as appropriate, early in an environmental decision-making procedure, and in an adequate, timely and effective manner, inter alia, of:

(a) The proposed activity and the application on which a decision will be taken;

(b) The nature of possible decisions or the draft decision;

(c) The public authority responsible for making the decision;

(d) The envisaged procedure, including, as and when this information can be provided:

(i) The commencement of the procedure;

(ii) The opportunities for the public to participate;

(iii) The time and venue of any envisaged public hearing;

(iv) An indication of the public authority from which relevant information can be obtained and where the relevant information has been deposited for examination by the public;

(v) An indication of the relevant public authority or any other official body to which comments or questions can be submitted and of the time schedule for transmittal of comments or questions; and

(vi) An indication of what environmental information relevant to the proposed activity is available; and

(e) The fact that the activity is subject to a national or transboundary environmental impact assessment procedure.

3. The public participation procedures shall include reasonable time-frames for the different phases, allowing sufficient time for informing the public in accordance with paragraph 2 above and for the public to prepare and participate effectively during the environmental decision-making.

4. Each Party shall provide for early public participation, when all options are open and effective public participation can take place.

5. Each Party should, where appropriate, encourage prospective applicants to identify the public concerned, to enter into discussions, and to provide information regarding the objectives of their application before applying for a permit.

6. Each Party shall require the competent public authorities to give the public concerned access for examination, upon request where so required under national law, free of charge and as soon as it becomes available, to all information relevant to the decision-making referred to in this article that is available at the time of the public participation procedure, without prejudice to the right of Parties to refuse to disclose certain information in accordance with article 4, paragraphs 3 and 4. The relevant information shall include at least, and without prejudice to the provisions of article 4:

(a) A description of the site and the physical and technical characteristics of the proposed activity, including an estimate of the expected residues and emissions;

(b) A description of the significant effects of the proposed activity on the environment;

(c) A description of the measures envisaged to prevent and/or reduce the effects, including emissions;

(d) A non-technical summary of the above;

(e) An outline of the main alternatives studied by the applicant; and

(f) In accordance with national legislation, the main reports and advice issued to the public authority at the time when the public concerned shall be informed in accordance with paragraph 2 above.

7. Procedures for public participation shall allow the public to submit, in writing or, as appropriate, at a public hearing or inquiry with the applicant, any comments, information, analyses or opinions that it considers relevant to the proposed activity.

8. Each Party shall ensure that in the decision due account is taken of the outcome of the public participation.

9. Each Party shall ensure that, when the decision has been taken by the public authority, the public is promptly informed of the decision in accordance with the appropriate procedures. Each Party shall make accessible to the public the text of the decision along with the reasons and considerations on which the decision is based.

10. Each Party shall ensure that, when a public authority reconsiders or updates the operating conditions for an activity referred to in paragraph 1, the provisions of paragraphs 2 to 9 of this article are applied mutatis mutandis, and where appropriate.

11. Each Party shall, within the framework of its national law, apply, to the extent feasible and appropriate, provisions of this article to decisions on whether to permit the deliberate release of genetically modified organisms into the environment.

Article 7

PUBLIC PARTICIPATION CONCERNING PLANS, PROGRAMMES AND POLICIES RELATING TO THE ENVIRONMENT

Each Party shall make appropriate practical and/or other provisions for the public to participate during the preparation of plans and programmes relating to the environment, within a transparent and fair framework, having provided the necessary information to the public. Within this framework, article 6, paragraphs 3, 4 and 8, shall be applied. The public which may participate shall be identified by the relevant public authority, taking into account the objectives of this Convention. To the extent appropriate, each Party shall endeavour to provide opportunities for public participation in the preparation of policies relating to the environment.

Article 8

PUBLIC PARTICIPATION DURING THE PREPARATION OF EXECUTIVE REGULATIONS AND/OR GENERALLY APPLICABLE LEGALLY BINDING NORMATIVE INSTRUMENTS

Each Party shall strive to promote effective public participation at an appropriate stage, and while options are still open, during the preparation by public authorities of executive regulations and other generally applicable legally binding rules that may have a significant effect on the environment. To this end, the following steps should be taken:

(a) Time-frames sufficient for effective participation should be

fixed;

(b) Draft rules should be published or otherwise made publicly available; and

(c) The public should be given the opportunity to comment, directly or through representative consultative bodies.

The result of the public participation shall be taken into account as far as possible.

Article 9

ACCESS TO JUSTICE

1. Each Party shall, within the framework of its national legislation, ensure that any person who considers that his or her request for information under article 4 has been ignored, wrongfully refused, whether in part or in full, inadequately answered, or otherwise not dealt with in accordance with the provisions of that article, has access to a review procedure before a court of law or another independent and impartial body established by law.

In the circumstances where a Party provides for such a review by a court of law, it shall ensure that such a person also has access to an expeditious procedure established by law that is free of charge or inexpensive for reconsideration by a public authority or review by an independent and impartial body other than a court of law.

Final decisions under this paragraph 1 shall be binding on the public authority holding the information. Reasons shall be stated in writing, at least where access to information is refused under this paragraph.

2. Each Party shall, within the framework of its national legislation, ensure that members of the public concerned

(a) Having a sufficient interest

or, alternatively,

(b) Maintaining impairment of a right, where the administrative procedural law of a Party requires this as a precondition,

have access to a review procedure before a court of law and/or another independent and impartial body established by law, to challenge the substantive and procedural legality of any decision, act or omission subject to the provisions of article 6 and, where so provided for under national law and without prejudice to paragraph 3 below, of other relevant provisions of this Convention.

What constitutes a sufficient interest and impairment of a right shall be determined in accordance with the requirements of national law and consistently with the objective of giving the public concerned wide access to justice within the scope of this Convention. To this end, the interest of any non-governmental organization meeting the requirements referred to in article 2, paragraph 5, shall be deemed sufficient for the purpose of subparagraph (a) above. Such organizations shall also be deemed to have rights capable of being impaired for the purpose of subparagraph (b) above.

The provisions of this paragraph 2 shall not exclude the possibility of

a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

3. In addition and without prejudice to the review procedures referred to in paragraphs 1 and 2 above, each Party shall ensure that, where they meet the criteria, if any, laid down in its national law, members of the public have access to administrative or judicial procedures to challenge acts and omissions by private persons and public authorities which contravene provisions of its national law relating to the environment.

4. In addition and without prejudice to paragraph 1 above, the procedures referred to in paragraphs 1, 2 and 3 above shall provide adequate and effective remedies, including injunctive relief as appropriate, and be fair,

equitable, timely and not prohibitively expensive. Decisions under this article shall be given or recorded in writing. Decisions of courts, and whenever possible of other bodies, shall be publicly accessible.

5. In order to further the effectiveness of the provisions of this article, each Party shall ensure that information is provided to the public on access to administrative and judicial review procedures and shall consider the establishment of appropriate assistance mechanisms to remove or reduce financial and other barriers to access to justice.

Article 10

MEETING OF THE PARTIES

1. The first meeting of the Parties shall be convened no later than one year after the date of the entry into force of this Convention. Thereafter, an ordinary meeting of the Parties shall be held at least once every two years, unless otherwise decided by the Parties, or at the written request of any Party, provided that, within six months of the request being communicated to all Parties by the Executive Secretary of the Economic Commission for Europe, the said request is supported by at least one third of the Parties.

2. At their meetings, the Parties shall keep under continuous review the implementation of this Convention on the basis of regular reporting by the Parties, and, with this purpose in mind, shall:

(a) Review the policies for and legal and methodological approaches to access to information, public participation in decision-making and access to justice in environmental matters, with a view to further improving them;

(b) Exchange information regarding experience gained in concluding and implementing bilateral and multilateral agreements or other arrangements having relevance to the purposes of this Convention and to which one or more of the Parties are a party;

(c) Seek, where appropriate, the services of relevant ECE bodies and other competent international bodies and specific committees in all aspects pertinent to the achievement of the purposes of this Convention;

(d) Establish any subsidiary bodies as they deem necessary;

(e) Prepare, where appropriate, protocols to this Convention;

(f) Consider and adopt proposals for amendments to this Convention in accordance with the provisions of article 14;

(g) Consider and undertake any additional action that may be required for the achievement of the purposes of this Convention;

(h) At their first meeting, consider and by consensus adopt rules of procedure for their meetings and the meetings of subsidiary bodies;

(i) At their first meeting, review their experience in implementing the provisions of article 5, paragraph 9, and consider what steps are necessary to develop further the system referred to in that paragraph, taking into account international processes and developments, including the elaboration of an appropriate instrument concerning pollution release and transfer registers or inventories which could be annexed to this Convention.

3. The Meeting of the Parties may, as necessary, consider establishing financial arrangements on a consensus basis.

4. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State or regional economic integration organization entitled under article 17 to sign this Convention but which is not a Party to this Convention, and any intergovernmental organization qualified in the fields to which this Convention relates, shall be entitled to participate as observers in the meetings of the Parties.

5. Any non-governmental organization, qualified in the fields to which this Convention relates, which has informed the Executive Secretary of the Economic Commission for Europe of its wish to be represented at a meeting of the Parties shall be entitled to participate as an observer unless at least one third of the Parties present in the meeting raise objections.

6. For the purposes of paragraphs 4 and 5 above, the rules of procedure referred to in paragraph 2 (h) above shall provide for practical arrangements for the admittance procedure and other relevant terms.

Article 11

RIGHT TO VOTE

1. Except as provided for in paragraph 2 below, each Party to this Convention shall have one vote.

2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States which are Parties to this Convention. Such organizations shall not exercise their right to vote if their member States exercise theirs, and vice versa.

Article 12

SECRETARIAT

The Executive Secretary of the Economic Commission for Europe shall carry out the following secretariat functions:

(a) The convening and preparing of meetings of the Parties;

(b) The transmission to the Parties of reports and other information received in accordance with the provisions of this Convention; and

(c) Such other functions as may be determined by the Parties.

Article 13

ANNEXES

The annexes to this Convention shall constitute an integral part thereof.

Article 14

AMENDMENTS TO THE CONVENTION

1. Any Party may propose amendments to this Convention.

2. The text of any proposed amendment to this Convention shall be submitted in writing to the Executive Secretary of the Economic Commission for Europe, who shall communicate it to all Parties at least ninety days before the meeting of the Parties at which it is proposed for adoption.

3. The Parties shall make every effort to reach agreement on any proposed amendment to this Convention by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting.

4. Amendments to this Convention adopted in accordance with paragraph 3 above shall be communicated by the Depositary to all Parties for ratification, approval or acceptance. Amendments to this Convention other than those to an annex shall enter into force for Parties having ratified, approved or accepted them on the ninetieth day after the receipt by the Depositary of notification of their ratification, approval or acceptance by at least three fourths of these Parties. Thereafter they shall enter into force for any other Party on the ninetieth day after that Party deposits its instrument of ratification, approval or acceptance of the amendments.

5. Any Party that is unable to approve an amendment to an annex to this Convention shall so notify the Depositary in writing within twelve months from the date of the communication of the adoption. The Depositary shall without delay notify all Parties of any such notification received. A Party may at any time substitute an acceptance for its previous notification and, upon deposit of an instrument of acceptance with the Depositary, the amendments to such an annex shall become effective for that Party.

6. On the expiry of twelve months from the date of its communication by the Depositary as provided for in paragraph 4 above an amendment to an annex shall become effective for those Parties which have not submitted a notification to the Depositary in accordance with the provisions of paragraph 5 above, provided that not more than one third of the Parties have submitted such a notification.

7. For the purposes of this article, "Parties present and voting" means Parties present and casting an affirmative or negative vote.

Article 15

REVIEW OF COMPLIANCE

The Meeting of the Parties shall establish, on a consensus basis, optional arrangements of a non-confrontational, non-judicial and consultative nature for reviewing compliance with the provisions of this Convention. These arrangements shall allow for appropriate public involvement and may include the option of considering communications from members of the public on matters related to this Convention.

Article 16

SETTLEMENT OF DISPUTES

1. If a dispute arises between two or more Parties about the interpretation or application of this Convention, they shall seek a solution by negotiation or by any other means of dispute settlement acceptable to the parties to the dispute.

2. When signing, ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a Party may declare in writing to the Depositary that, for a dispute not resolved in accordance with paragraph 1 above, it accepts one or both of the following means of dispute settlement as compulsory in relation to any Party accepting the same obligation:

(a) Submission of the dispute to the International Court of Justice;

(b) Arbitration in accordance with the procedure set out in annex II.

3. If the parties to the dispute have accepted both means of dispute settlement referred to in paragraph 2 above, the dispute may be submitted only to the International Court of Justice, unless the parties agree otherwise.

Article 17

SIGNATURE

This Convention shall be open for signature at Aarhus (Denmark) on 25 June 1998, and thereafter at United Nations Headquarters in New York until 21 December 1998, by States members of the Economic Commission for Europe as well as States having consultative status with the Economic Commission for Europe pursuant to paragraphs 8 and 11 of Economic and Social Council resolution 36 (IV) of 28 March 1947, and by regional economic integration organizations constituted by sovereign States members of the Economic Commission for Europe to which their member States have transferred competence over matters governed by this Convention, including the competence to enter into treaties in respect of these matters.

Article 18

DEPOSITARY

The Secretary-General of the United Nations shall act as the Depositary of this Convention.

Article 19

RATIFICATION, ACCEPTANCE, APPROVAL AND ACCESSION

1. This Convention shall be subject to ratification, acceptance or approval by signatory States and regional economic integration organizations.

2. This Convention shall be open for accession as from 22 December 1998 by the States and regional economic integration organizations referred to in article 17.

3. Any other State, not referred to in paragraph 2 above, that is a Member of the United Nations may accede to the Convention upon approval by the Meeting of the Parties.

4. Any organization referred to in article 17 which becomes a Party to this Convention without any of its member States being a Party shall be bound by all the obligations under this Convention. If one or more of such an organization's member States is a Party to this Convention, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under this Convention concurrently.

5. In their instruments of ratification, acceptance, approval or accession, the regional economic integration organizations referred to in article 17 shall declare the extent of their competence with respect to the matters

governed by this Convention. These organizations shall also inform the Depositary of any substantial modification to the extent of their competence.

Article 20

ENTRY INTO FORCE

1. This Convention shall enter into force on the ninetieth day after the date of deposit of the sixteenth instrument of ratification, acceptance, approval or accession.

2. For the purposes of paragraph 1 above, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of such an organization.

3. For each State or organization referred to in article 17 which ratifies, accepts or approves this Convention or accedes thereto after the deposit of the sixteenth instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the ninetieth day after the date of deposit by such State or organization of its instrument of ratification, acceptance, approval or accession.

Article 21

WITHDRAWAL

At any time after three years from the date on which this Convention has come into force with respect to a Party, that Party may withdraw from the Convention by giving written notification to the Depositary. Any such withdrawal shall take effect on the ninetieth day after the date of its receipt by the Depositary.

Article 22

AUTHENTIC TEXTS

The original of this Convention, of which the English, French and Russian texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF the undersigned, being duly authorized thereto, have signed this Convention.

DONE at Aarhus (Denmark), this twenty-fifth day of June, one thousand nine hundred and ninety-eight.

Annex I

LIST OF ACTIVITIES REFERRED TO IN ARTICLE 6, PARAGRAPH 1 (a)

1. Energy sector:

- Mineral oil and gas refineries;
- Installations for gasification and liquefaction;
- Thermal power stations and other combustion installations with a heat input of 50 megawatts (MW)or more;
- Coke ovens;
- Nuclear power stations and other nuclear reactors including the dismantling or decommissioning of such power stations or reactors 1/ (except research installations for the production and conversion of fissionable and fertile materials whose maximum power does not exceed 1 kW continuous thermal load);
- Installations for the reprocessing of irradiated nuclear fuel;
- Installations designed:
  - For the production or enrichment of nuclear fuel;
  - For the processing of irradiated nuclear fuel or high-level radioactive waste;
  - For the final disposal of irradiated nuclear fuel;
  - Solely for the final disposal of radioactive waste;
  - Solely for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the production site.

2. Production and processing of metals:

- Metal ore (including sulphide ore) roasting or sintering installations;
- Installations for the production of pig-iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2.5 tons per hour;
- Installations for the processing of ferrous metals:
  (i) Hot-rolling mills with a capacity exceeding 20 tons of crude steel per hour;
  (ii) Smitheries with hammers the energy of which exceeds 50 kilojoules per hammer, where the calorific power used exceeds 20 MW;
  (iii) Application of protective fused metal coats with an input exceeding 2 tons of crude steel per hour;
- Ferrous metal foundries with a production capacity exceeding 20 tons per day;
- Installations:
  (i) For the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes;
  (ii) For the smelting, including the alloying, of non-ferrous metals, including recovered products (refining, foundry casting, etc.), with a melting capacity exceeding 4 tons per day for lead and cadmium or 20 tons per day for all other metals;
- Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m^3.

3. Mineral industry:

- Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tons per day or lime in rotary kilns with a production capacity exceeding 50 tons per day or in other furnaces with a production capacity exceeding 50 tons per day;
- Installations for the production of asbestos and the manufacture of asbestos-based products;
- Installations for the manufacture of glass including glass fibre with a melting capacity exceeding 20 tons per day;
- Installations for melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tons per day;
- Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tons per day, and/or with a kiln capacity exceeding 4 m^3 and with a setting density per kiln exceeding 300 kg/m^3.

4. Chemical industry: Production within the meaning of the categories of activities contained in this paragraph means the production on an industrial scale by chemical processing of substances or groups of substances listed in subparagraphs (a) to (g):

(a) Chemical installations for the production of basic organic chemicals, such as:

(i) Simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
(ii) Oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins;
(iii) Sulphurous hydrocarbons;
(iv) Nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates;
(v) Phosphorus-containing hydrocarbons;
(vi) Halogenic hydrocarbons;
(vii) Organometallic compounds;
(viii) Basic plastic materials (polymers, synthetic fibres and cellulose-based fibres);
(ix) Synthetic rubbers;
(x) Dyes and pigments;
(xi) Surface-active agents and surfactants;

(b) Chemical installations for the production of basic inorganic chemicals, such as:

(i) Gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride;
(ii) Acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids;
(iii) Bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;
(iv) Salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate;

(v) Non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide;

(c) Chemical installations for the production of phosphorous-, nitrogen- or potassium-based fertilizers (simple or compound fertilizers);

(d) Chemical installations for the production of basic plant health products and of biocides;

(e) Installations using a chemical or biological process for the production of basic pharmaceutical products;

(f) Chemical installations for the production of explosives;

(g) Chemical installations in which chemical or biological processing is used for the production of protein feed additives, ferments and other protein substances.

5. Waste management:

- Installations for the incineration, recovery, chemical treatment or landfill of hazardous waste;
- Installations for the incineration of municipal waste with a capacity exceeding 3 tons per hour;
- Installations for the disposal of non-hazardous waste with a capacity exceeding 50 tons per day;
- Landfills receiving more than 10 tons per day or with a total capacity exceeding 25 000 tons, excluding landfills of inert waste.

6. Waste-water treatment plants with a capacity exceeding 150 000 population equivalent.

7. Industrial plants for the:

(a) Production of pulp from timber or similar fibrous materials;

(b) Production of paper and board with a production capacity exceeding 20 tons per day.

8. (a) Construction of lines for long-distance railway traffic and of airports 2/ with a basic runway length of 2 100 m or more;

(b) Construction of motorways and express roads; 3/

(c) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road, would be 10 km or more in a continuous length.

9. (a) Inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1 350 tons;

(b) Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1 350 tons.

10. Groundwater abstraction or artificial groundwater recharge schemes where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres.

11. (a) Works for the transfer of water resources between river basins where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year;

(b) In all other cases, works for the transfer of water resources between river basins where the multiannual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5% of this flow.

In both cases transfers of piped drinking water are excluded.

12. Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tons/day in the case of petroleum and 500 000 cubic metres/day in the case of gas.

13. Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres.

14. Pipelines for the transport of gas, oil or chemicals with a diameter of more than 800 mm and a length of more than 40 km.

15. Installations for the intensive rearing of poultry or pigs with more than:

(a) 40 000 places for poultry;

(b) 2 000 places for production pigs (over 30 kg); or

(c) 750 places for sows.

16. Quarries and opencast mining where the surface of the site exceeds 25 hectares, or peat extraction, where the surface of the site exceeds 150 hectares.

17. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.

18. Installations for the storage of petroleum, petrochemical, or chemical products with a capacity of 200 000 tons or more.

19. Other activities:

- Plants for the pretreatment (operations such as washing, bleaching, mercerization) or dyeing of fibres or textiles where the treatment capacity exceeds 10 tons per day;
- Plants for the tanning of hides and skins where the treatment capacity exceeds 12 tons of finished products per day;
- (a) Slaughterhouses with a carcass production capacity greater than 50 tons per day;

  (b) Treatment and processing intended for the production of food products from:

    (i) Animal raw materials (other than milk) with a finished product production capacity greater than 75 tons per day;

    (ii) Vegetable raw materials with a finished product production capacity greater than 300 tons per day (average value on a quarterly basis);

(c) Treatment and processing of milk, the quantity of milk received being greater than 200 tons per day (average value on an annual basis);

- Installations for the disposal or recycling of animal carcasses and animal waste with a treatment capacity exceeding 10 tons per day;
- Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kg per hour or more than 200 tons per year;
- Installations for the production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitization.

20. Any activity not covered by paragraphs 1-19 above where public participation is provided for under an environmental impact assessment procedure in accordance with national legislation.

21. The provision of article 6, paragraph 1 (a) of this Convention, does not apply to any of the above projects undertaken exclusively or mainly for research, development and testing of new methods or products for less than two years unless they would be likely to cause a significant adverse effect on environment or health.

22. Any change to or extension of activities, where such a change or extension in itself meets the criteria/thresholds set out in this annex, shall be subject to article 6, paragraph 1 (a) of this Convention. Any other change or extension of activities shall be subject to article 6, paragraph 1 (b) of this Convention.

Notes

1/ Nuclear power stations and other nuclear reactors cease to be such an installation when all nuclear fuel and other radioactively contaminated elements have been removed permanently from the installation site.

2/ For the purposes of this Convention, "airport" means an airport which complies with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organization (Annex 14).

3/ For the purposes of this Convention, "express road" means a road which complies with the definition in the European Agreement on Main International Traffic Arteries of 15 November 1975.

Annex II

ARBITRATION

1. In the event of a dispute being submitted for arbitration pursuant to article 16, paragraph 2, of this Convention, a party or parties shall notify the secretariat of the subject matter of arbitration and indicate, in particular, the articles of this Convention whose interpretation or application is at issue. The secretariat shall forward the information received to all Parties to this Convention.

2. The arbitral tribunal shall consist of three members. Both the claimant party or parties and the other party or parties to the dispute shall appoint an arbitrator, and the two arbitrators so appointed shall designate by common agreement the third arbitrator, who shall be the president of the arbitral tribunal. The latter shall not be a national of one of the parties to the dispute, nor have his or her usual place of residence in the territory of one of these parties, nor be employed by any of them, nor have dealt with the case in any other capacity.

3. If the president of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the Executive Secretary of the Economic Commission for Europe shall, at the request of either party to the dispute, designate the president within a further two-month period.

4. If one of the parties to the dispute does not appoint an arbitrator within two months of the receipt of the request, the other party may so inform the Executive Secretary of the Economic Commission for Europe, who shall designate the president of the arbitral tribunal within a further two-month period. Upon designation, the president of the arbitral tribunal shall request the party which has not appointed an arbitrator to do so within two months. If it fails to do so within that period, the president shall so inform the Executive Secretary of the Economic Commission for Europe, who shall make this appointment within a further two-month period.

5. The arbitral tribunal shall render its decision in accordance with international law and the provisions of this Convention.

6. Any arbitral tribunal constituted under the provisions set out in this annex shall draw up its own rules of procedure.

7. The decisions of the arbitral tribunal, both on procedure and on substance, shall be taken by majority vote of its members.

8. The tribunal may take all appropriate measures to establish the facts.

9. The parties to the dispute shall facilitate the work of the arbitral tribunal and, in particular, using all means at their disposal, shall:

(a) Provide it with all relevant documents, facilities and information;

(b) Enable it, where necessary, to call witnesses or experts and receive their evidence.

10. The parties and the arbitrators shall protect the confidentiality of any information that they receive in confidence during the proceedings of the arbitral tribunal.

11. The arbitral tribunal may, at the request of one of the parties, recommend interim measures of protection.

12. If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to render its final decision. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings.

13. The arbitral tribunal may hear and determine counter-claims arising directly out of the subject matter of the dispute.

14. Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the expenses of the tribunal, including the remuneration of its members, shall be borne by the parties to the dispute in equal shares. The tribunal shall keep a record of all its expenses, and shall furnish a final statement thereof to the parties.

15. Any Party to this Convention which has an interest of a legal nature in the subject matter of the dispute, and which may be affected by a decision in the case, may intervene in the proceedings with the consent of the tribunal.

16. The arbitral tribunal shall render its award within five months of the date on which it is established, unless it finds it necessary to extend the time limit for a period which should not exceed five months.

17. The award of the arbitral tribunal shall be accompanied by a statement of reasons. It shall be final and binding upon all parties to the dispute. The award will be transmitted by the arbitral tribunal to the parties to the dispute and to the secretariat. The secretariat will forward the information received to all Parties to this Convention.

18. Any dispute which may arise between the parties concerning the interpretation or execution of the award may be submitted by either party to the arbitral tribunal which made the award or, if the latter cannot be seized thereof, to another tribunal constituted for this purpose in the same manner as the first.

►B DIRECTIVE 2003/35/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 26 May 2003

providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC

(OJ L 156, 25.6.2003, p. 17)

Amended by:

		Official Journal		
		No	page	date
►M1	Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011	L 26	1	28.1.2012

▼B

DIRECTIVE 2003/35/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 26 May 2003

providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175 thereof,

Having regard to the proposal from the Commission ([1]),

Having regard to the opinion of the European Economic and Social Committee ([2]),

Having regard to the opinion of the Committee of the Regions ([3]),

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([4]), in the light of the joint text approved by the Conciliation Committee on 15 January 2003,

Whereas:

(1) Community legislation in the field of the environment aims to contribute to preserving, protecting and improving the quality of the environment and protecting human health.

(2) Community environmental legislation includes provisions for public authorities and other bodies to take decisions which may have a significant effect on the environment as well as on personal health and well-being.

(3) Effective public participation in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken.

([1]) OJ C 154 E, 29.5.2001, p. 123.
([2]) OJ C 221, 7.8.2001, p. 65.
([3]) OJ C 357, 14.12.2001, p. 58.
([4]) Opinion of the European Parliament of 23 October 2001 (OJ C 112, 9.5.2002, p. 125 (E)), Council Common Position of 25 April 2002 (OJ C 170 E, 16.7.2002, p. 22) and Decision of the European Parliament of 5 September 2002 (not yet published in the Official Journal). Decision of the European Parliament of 30 January 2003 and Decision of the Council of 4 March 2003.

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(4) Participation, including participation by associations, organisations and groups, in particular non-governmental organisations promoting environmental protection, should accordingly be fostered, including *inter alia* by promoting environmental education of the public.

(5) On 25 June 1998 the Community signed the UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Århus Convention). Community law should be properly aligned with that Convention with a view to its ratification by the Community.

(6) Among the objectives of the Århus Convention is the desire to guarantee rights of public participation in decision-making in environmental matters in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.

(7) Article 6 of the Århus Convention provides for public participation in decisions on the specific activities listed in Annex I thereto and on activities not so listed which may have a significant effect on the environment.

(8) Article 7 of the Århus Convention provides for public participation concerning plans and programmes relating to the environment.

(9) Article 9(2) and (4) of the Århus Convention provides for access to judicial or other procedures for challenging the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of Article 6 of the Convention.

(10) Provision should be made in respect of certain Directives in the environmental area which require Member States to produce plans and programmes relating to the environment but which do not contain sufficient provisions on public participation, so as to ensure public participation consistent with the provisions of the Århus Convention, in particular Article 7 thereof. Other relevant Community legislation already provides for public participation in the preparation of plans and programmes and, for the future, public participation requirements in line with the Århus Convention will be incorporated into the relevant legislation from the outset.

(11) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment [1], and Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control [2] should be amended to ensure that they are fully compatible with the provisions of the Århus Convention, in particular Article 6 and Article 9(2) and (4) thereof.

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[1] OJ L 175, 5.7.1985, p. 40. Directive as amended by Directive 97/11/EC (OJ L 73, 14.3.1997, p. 5).

[2] OJ L 257, 10.10.1996, p. 26.

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(12) Since the objective of the proposed action, namely to contribute to the implementation of the obligations arising under the Århus Convention, cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved at Community level, the Community may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Objective

The objective of this Directive is to contribute to the implementation of the obligations arising under the Århus Convention, in particular by:

(a) providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment;

(b) improving the public participation and providing for provisions on access to justice within Council Directives 85/337/EEC and 96/61/EC.

Article 2

Public participation concerning plans and programmes

1. For the purposes of this Article, 'the public' shall mean one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups.

2. Member States shall ensure that the public is given early and effective opportunities to participate in the preparation and modification or review of the plans or programmes required to be drawn up under the provisions listed in Annex I.

To that end, Member States shall ensure that:

(a) the public is informed, whether by public notices or other appropriate means such as electronic media where available, about any proposals for such plans or programmes or for their modification or review and that relevant information about such proposals is made available to the public including *inter alia* information about the right to participate in decision-making and about the competent authority to which comments or questions may be submitted;

(b) the public is entitled to express comments and opinions when all options are open before decisions on the plans and programmes are made;

(c) in making those decisions, due account shall be taken of the results of the public participation;

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(d) having examined the comments and opinions expressed by the public, the competent authority makes reasonable efforts to inform the public about the decisions taken and the reasons and considerations upon which those decisions are based, including information about the public participation process.

3. Member States shall identify the public entitled to participate for the purposes of paragraph 2, including relevant non-governmental organisations meeting any requirements imposed under national law, such as those promoting environmental protection.

The detailed arrangements for public participation under this Article shall be determined by the Member States so as to enable the public to prepare and participate effectively.

Reasonable time-frames shall be provided allowing sufficient time for each of the different stages of public participation required by this Article.

4. This Article shall not apply to plans and programmes designed for the sole purpose of serving national defence or taken in case of civil emergencies.

5. This Article shall not apply to plans and programmes set out in Annex I for which a public participation procedure is carried out under Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment ([1]) or under Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ([2]).

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Article 4

Amendment of Directive 96/61/EC

Directive 96/61/EC is hereby amended as follows:

1. Article 2 shall be amended as follows:

(a) the following sentence shall be added to point 10(b):

‘For the purposes of this definition, any change to or extension of an operation shall be deemed to be substantial if the change or extension in itself meets the thresholds, if any, set out in Annex I.’;

(b) the following points shall be added:

‘13. “the public” shall mean one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups;

([1]) OJ L 197, 21.7.2001, p. 30.
([2]) OJ L 327, 22.12.2000, p. 1. Directive as amended by Decision No 2455/2001/EC (OJ L 331, 15.12.2001, p. 1).

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14. “the public concerned” shall mean the public affected or likely to be affected by, or having an interest in, the taking of a decision on the issuing or the updating of a permit or of permit conditions; for the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest;’

2. in Article 6(1), first subparagraph, the following indent shall be added:

‘— the main alternatives, if any, studied by the applicant in outline.’

3. Article 15 shall be amended as follows:

(a) paragraph 1 shall be replaced by the following:

‘1. Member States shall ensure that the public concerned are given early and effective opportunities to participate in the procedure for:

— issuing a permit for new installations,

— issuing a permit for any substantial change in the operation of an installation,

— updating of a permit or permit conditions for an installation in accordance with Article 13, paragraph 2, first indent.

The procedure set out in Annex V shall apply for the purposes of such participation.’;

(b) the following paragraph shall be added:

‘5. When a decision has been taken, the competent authority shall inform the public in accordance with the appropriate procedures and shall make available to the public the following information:

(a) the content of the decision, including a copy of the permit and of any conditions and any subsequent updates; and

(b) having examined the concerns and opinions expressed by the public concerned, the reasons and considerations on which the decision is based, including information on the public participation process.’;

4. the following Article shall be inserted:

‘Article 15a

Access to justice

Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned:

(a) having a sufficient interest, or alternatively,

(b) maintaining the impairment of a right, where administrative procedural law of a Member State requires this as a precondition;

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have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of this Directive.

Member States shall determine at what stage the decisions, acts or omissions may be challenged.

What constitutes a sufficient interest and impairment of a right shall be determined by the Member States, consistently with the objective of giving the public concerned wide access to justice. To this end, the interest of any non-governmental organisation meeting the requirements referred to in Article 2(14) shall be deemed sufficient for the purpose of subparagraph (a) of this Article. Such organisations shall also be deemed to have rights capable of being impaired for the purpose of subparagraph (b) of this Article.

The provisions of this Article shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

Any such procedure shall be fair, equitable, timely and not prohibitively expensive.

In order to further the effectiveness of the provisions of this Article, Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures.';

5. Article 17 shall be amended as follows:

(a) paragraph 1 shall be replaced by the following:

'1. Where a Member State is aware that the operation of an installation is likely to have significant negative effects on the environment of another Member State, or where a Member State likely to be significantly affected so requests, the Member State in whose territory the application for a permit pursuant to Article 4 or Article 12(2) was submitted shall forward to the other Member State any information required to be given or made available pursuant to Annex V at the same time as it makes it available to its own nationals. Such information shall serve as a basis for any consultations necessary in the framework of the bilateral relations between the two Member States on a reciprocal and equivalent basis.';

(b) the following paragraphs shall be added:

'3. The results of any consultations pursuant to paragraphs 1 and 2 must be taken into consideration when the competent authority reaches a decision on the application.

4. The competent authority shall inform any Member State, which has been consulted pursuant to paragraph 1, of the decision reached on the application and shall forward to it the information referred to in Article 15(5). That Member State shall take the measures necessary to ensure that that information is made available in an appropriate manner to the public concerned in its own territory.';

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6. an Annex V shall be added, as set out in Annex II to this Directive.

Article 5

Reporting and review

By 25 June 2009, the Commission shall send a report on the application and effectiveness of this Directive to the European Parliament and to the Council. With a view to further integrating environmental protection requirements, in accordance with Article 6 of the Treaty, and taking into account the experience acquired in the application of this Directive in the Member States, such a report will be accompanied by proposals for amendment of this Directive, if appropriate. In particular, the Commission will consider the possibility of extending the scope of this Directive to other plans and programmes relating to the environment.

Article 6

Implementation

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 25 June 2005 at the latest. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

Article 7

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

Article 8

Addressees

This Directive is addressed to the Member States.

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ANNEX I

PROVISIONS FOR PLANS AND PROGRAMMES REFERRED TO IN ARTICLE 2

(a) Article 7(1) of Council Directive 75/442/EEC of 15 July 1975 on waste ([1]).

(b) Article 6 of Council Directive 91/157/EEC of 18 March 1991 on batteries and accumulators containing certain dangerous substances ([2]).

(c) Article 5(1) of Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources ([3]).

(d) Article 6(1) of Council Directive 91/689/EEC of 12 December 1991 on hazardous waste ([4]).

(e) Article 14 of Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste ([5]).

(f) Article 8(3) of Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management ([6]).

([1]) OJ L 194, 25.7.1975, p. 39. Directive as last amended by Commission Decision 96/350/EC (OJ L 135, 6.6.1996, p. 32).
([2]) OJ L 78, 26.3.1991, p. 38. Directive as last amended by Commission Directive 98/101/EC (OJ L 1, 5.1.1999, p. 1).
([3]) OJ L 375, 31.12.1991, p. 1.
([4]) OJ L 377, 31.12.1991, p. 20. Directive as last amended by Directive 94/31/EC (OJ L 168, 2.7.1994, p. 28).
([5]) OJ L 365, 31.12.1994, p. 10.
([6]) OJ L 296, 21.11.1996, p. 55.

▼B

ANNEX II

In Directive 96/61/EC, the following Annex shall be added:

'ANNEX V

Public participation in decision-making

1. The public shall be informed (by public notices or other appropriate means such as electronic media where available) of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:

   (a) the application for a permit or, as the case may be, the proposal for the updating of a permit or of permit conditions in accordance with Article 15(1), including the description of the elements listed in Article 6(1);

   (b) where applicable, the fact that a decision is subject to a national or transboundary environmental impact assessment or to consultations between Member States in accordance with Article 17;

   (c) details of the competent authorities responsible for taking the decision, those from which relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;

   (d) the nature of possible decisions or, where there is one, the draft decision;

   (e) where applicable, the details relating to a proposal for the updating of a permit or of permit conditions;

   (f) an indication of the times and places where, or means by which, the relevant information will be made available;

   (g) details of the arrangements for public participation and consultation made pursuant to point 5.

2. Member States shall ensure that, within appropriate time-frames, the following is made available to the public concerned:

   (a) in accordance with national legislation, the main reports and advice issued to the competent authority or authorities at the time when the public concerned were informed in accordance with point 1;

   (b) in accordance with the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information (*), information other than that referred to in point 1 which is relevant for the decision in accordance with Article 8 and which only becomes available after the time the public concerned was informed in accordance with point 1.

3. The public concerned shall be entitled to express comments and opinions to the competent authority before a decision is taken.

4. The results of the consultations held pursuant to this Annex must be taken into due account in the taking of a decision.

5. The detailed arrangements for informing the public (for example by bill posting within a certain radius or publication in local newspapers) and consulting the public concerned (for example by written submissions or by way of a public inquiry) shall be determined by the Member States. Reasonable time-frames for the different phases shall be provided, allowing sufficient time for informing the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to the provisions of this Annex.

(*) OJ L 41, 14.2.2003, p. 26.'

DIRECTIVE 2003/4/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 28 January 2003
on public access to environmental information and repealing Council Directive 90/313/EEC

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission [1],

Having regard to the opinion of the European Economic and Social Committee [2],

Having regard to the opinion of the Committee of the Regions [3],

Acting in accordance with the procedure laid down in Article 251 of the Treaty [4] in the light of the joint text approved by the Conciliation Committee on 8 November 2002,

Whereas:

(1) Increased public access to environmental information and the dissemination of such information contribute to a greater awareness of environmental matters, a free exchange of views, more effective participation by the public in environmental decision-making and, eventually, to a better environment.

(2) Council Directive 90/313/EEC of 7 June 1990 on the freedom of access to information on the environment [5] initiated a process of change in the manner in which public authorities approach the issue of openness and transparency, establishing measures for the exercise of the right of public access to environmental information which should be developed and continued. This Directive expands the existing access granted under Directive 90/313/EEC.

(3) Article 8 of that Directive requires Member States to report to the Commission on the experience gained, in the light of which the Commission is required to make a report to the European Parliament and to the Council together with any proposal for revision of the Directive which it may consider appropriate.

(4) The report produced under Article 8 of that Directive identifies concrete problems encountered in the practical application of the Directive.

(5) On 25 June 1998 the European Community signed the UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters ('the Aarhus Convention'). Provisions of Community law must be consistent with that Convention with a view to its conclusion by the European Community.

(6) It is appropriate in the interest of increased transparency to replace Directive 90/313/EEC rather than to amend it, so as to provide interested parties with a single, clear and coherent legislative text.

(7) Disparities between the laws in force in the Member States concerning access to environmental information held by public authorities can create inequality within the Community as regards access to such information or as regards conditions of competition.

(8) It is necessary to ensure that any natural and legal person has a right of access to environmental information held by or for public authorities without his having to state an interest.

(9) It is also necessary that public authorities make available and disseminate environmental information to the general public to the widest extent possible, in particular by using information and communication technologies. The future development of these technologies should be taken into account in the reporting on, and reviewing of, this Directive.

(10) The definition of environmental information should be clarified so as to encompass information in any form on the state of the environment, on factors, measures or activities affecting or likely to affect the environment or designed to protect it, on cost-benefit and economic analyses used within the framework of such measures or activities and also information on the state of human health and safety, including the contamination of the food chain, conditions of human life, cultural sites and built structures in as much as they are, or may be, affected by any of those matters.

(11) To take account of the principle in Article 6 of the Treaty, that environmental protection requirements should be integrated into the definition and implementation of Community policies and activities, the definition of public authorities should be expanded so as to encompass government or other public administration at national, regional or local level whether or not they have specific responsibilities for the environment. The definition should likewise be expanded to include other persons or bodies performing public administrative functions in relation to the environment under national law, as well as other persons or bodies acting under their control and having public responsibilities or functions in relation to the environment.

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[1] OJ C 337 E, 28.11.2000, p. 156 and OJ C 240 E, 28.8.2001, p. 289.
[2] OJ C 116, 20.4.2001, p. 43.
[3] OJ C 148, 18.5.2001, p. 9.
[4] Opinion of the European Parliament of 14 March 2001 (OJ C 343, 5.12.2001, p. 165), Council Common Position of 28 January 2002 (OJ C 113 E, 14.5.2002, p. 1) and Decision of the European Parliament of 30 May 2002 (not yet published in the Official Journal). Decision of the Council of 16 December 2002 and decision the European Parliament of 18 December 2002.
[5] OJ L 158, 23.6.1990, p. 56.

(12) Environmental information which is physically held by other bodies on behalf of public authorities should also fall within the scope of this Directive.

(13) Environmental information should be made available to applicants as soon as possible and within a reasonable time and having regard to any timescale specified by the applicant.

(14) Public authorities should make environmental information available in the form or format requested by an applicant unless it is already publicly available in another form or format or it is reasonable to make it available in another form or format. In addition, public authorities should be required to make all reasonable efforts to maintain the environmental information held by or for them in forms or formats that are readily reproducible and accessible by electronic means.

(15) Member States should determine the practical arrangements under which such information is effectively made available. These arrangements shall guarantee that the information is effectively and easily accessible and progressively becomes available to the public through public telecommunications networks, including publicly accessible lists of public authorities and registers or lists of environmental information held by or for public authorities.

(16) The right to information means that the disclosure of information should be the general rule and that public authorities should be permitted to refuse a request for environmental information in specific and clearly defined cases. Grounds for refusal should be interpreted in a restrictive way, whereby the public interest served by disclosure should be weighed against the interest served by the refusal. The reasons for a refusal should be provided to the applicant within the time limit laid down in this Directive.

(17) Public authorities should make environmental information available in part where it is possible to separate out any information falling within the scope of the exceptions from the rest of the information requested.

(18) Public authorities should be able to make a charge for supplying environmental information but such a charge should be reasonable. This implies that, as a general rule, charges may not exceed actual costs of producing the material in question. Instances where advance payment will be required should be limited. In particular cases, where public authorities make available environmental information on a commercial basis, and where this is necessary in order to guarantee the continuation of collecting and publishing such information, a market-based charge is considered to be reasonable; an advance payment may be required. A schedule of charges should be published and made available to applicants together with information on the circumstances in which a charge may be levied or waived.

(19) Applicants should be able to seek an administrative or judicial review of the acts or omissions of a public authority in relation to a request.

(20) Public authorities should seek to guarantee that when environmental information is compiled by them or on their behalf, the information is comprehensible, accurate and comparable. As this is an important factor in assessing the quality of the information supplied the method used in compiling the information should also be disclosed upon request.

(21) In order to increase public awareness in environmental matters and to improve environmental protection, public authorities should, as appropriate, make available and disseminate information on the environment which is relevant to their functions, in particular by means of computer telecommunication and/or electronic technology, where available.

(22) This Directive should be evaluated every four years, after its entry into force, in the light of experience and after submission of the relevant reports by the Member States, and be subject to revision on that basis. The Commission should submit an evaluation report to the European Parliament and the Council.

(23) Since the objectives of the proposed Directive cannot be sufficiently achieved by the Member States and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(24) The provisions of this Directive shall not affect the right of a Member State to maintain or introduce measures providing for broader access to information than required by this Directive,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Objectives

The objectives of this Directive are:

(a) to guarantee the right of access to environmental information held by or for public authorities and to set out the basic terms and conditions of, and practical arrangements for, its exercise; and

(b) to ensure that, as a matter of course, environmental information is progressively made available and disseminated to the public in order to achieve the widest possible systematic availability and dissemination to the public of environmental information. To this end the use, in particular, of computer telecommunication and/or electronic technology, where available, shall be promoted.

Article 2

Definitions

For the purposes of this Directive:

1. 'Environmental information' shall mean any information in written, visual, aural, electronic or any other material form on:
   (a) the state of the elements of the environment, such as air and atmosphere, water, soil, land, landscape and natural sites including wetlands, coastal and marine areas, biological diversity and its components, including genetically modified organisms, and the interaction among these elements;
   (b) factors, such as substances, energy, noise, radiation or waste, including radioactive waste, emissions, discharges and other releases into the environment, affecting or likely to affect the elements of the environment referred to in (a);
   (c) measures (including administrative measures), such as policies, legislation, plans, programmes, environmental agreements, and activities affecting or likely to affect the elements and factors referred to in (a) and (b) as well as measures or activities designed to protect those elements;
   (d) reports on the implementation of environmental legislation;
   (e) cost-benefit and other economic analyses and assumptions used within the framework of the measures and activities referred to in (c); and
   (f) the state of human health and safety, including the contamination of the food chain, where relevant, conditions of human life, cultural sites and built structures inasmuch as they are or may be affected by the state of the elements of the environment referred to in (a) or, through those elements, by any of the matters referred to in (b) and (c).
2. 'Public authority' shall mean:
   (a) government or other public administration, including public advisory bodies, at national, regional or local level;
   (b) any natural or legal person performing public administrative functions under national law, including specific duties, activities or services in relation to the environment; and
   (c) any natural or legal person having public responsibilities or functions, or providing public services, relating to the environment under the control of a body or person falling within (a) or (b).

   Member States may provide that this definition shall not include bodies or institutions when acting in a judicial or legislative capacity. If their constitutional provisions at the date of adoption of this Directive make no provision for a review procedure within the meaning of Article 6, Member States may exclude those bodies or institutions from that definition.
3. 'Information held by a public authority' shall mean environmental information in its possession which has been produced or received by that authority.
4. 'Information held for a public authority' shall mean environmental information which is physically held by a natural or legal person on behalf of a public authority.
5. 'Applicant' shall mean any natural or legal person requesting environmental information.
6. 'Public' shall mean one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organisations or groups.

Article 3

Access to environmental information upon request

1. Member States shall ensure that public authorities are required, in accordance with the provisions of this Directive, to make available environmental information held by or for them to any applicant at his request and without his having to state an interest.

2. Subject to Article 4 and having regard to any timescale specified by the applicant, environmental information shall be made available to an applicant:
   (a) as soon as possible or, at the latest, within one month after the receipt by the public authority referred to in paragraph 1 of the applicant's request; or
   (b) within two months after the receipt of the request by the public authority if the volume and the complexity of the information is such that the one-month period referred to in (a) cannot be complied with. In such cases, the applicant shall be informed as soon as possible, and in any case before the end of that one-month period, of any such extension and of the reasons for it.

3. If a request is formulated in too general a manner, the public authority shall as soon as possible, and at the latest within the timeframe laid down in paragraph 2(a), ask the applicant to specify the request and shall assist the applicant in doing so, e.g. by providing information on the use of the public registers referred to in paragraph 5(c). The public authorities may, where they deem it appropriate, refuse the request under Article 4(1)(c).

4. Where an applicant requests a public authority to make environmental information available in a specific form or format (including in the form of copies), the public authority shall make it so available unless:
   (a) it is already publicly available in another form or format, in particular under Article 7, which is easily accessible by applicants; or
   (b) it is reasonable for the public authority to make it available in another form or format, in which case reasons shall be given for making it available in that form or format.

For the purposes of this paragraph, public authorities shall make all reasonable efforts to maintain environmental information held by or for them in forms or formats that are readily reproducible and accessible by computer telecommunications or by other electronic means.

The reasons for a refusal to make information available, in full or in part, in the form or format requested shall be provided to the applicant within the time limit referred to in paragraph 2(a).

5. For the purposes of this Article, Member States shall ensure that:

(a) officials are required to support the public in seeking access to information;

(b) lists of public authorities are publicly accessible; and

(c) the practical arrangements are defined for ensuring that the right of access to environmental information can be effectively exercised, such as:

— the designation of information officers;

— the establishment and maintenance of facilities for the examination of the information required,

— registers or lists of the environmental information held by public authorities or information points, with clear indications of where such information can be found.

Member States shall ensure that public authorities inform the public adequately of the rights they enjoy as a result of this Directive and to an appropriate extent provide information, guidance and advice to this end.

Article 4

Exceptions

1. Member States may provide for a request for environmental information to be refused if:

(a) the information requested is not held by or for the public authority to which the request is addressed. In such a case, where that public authority is aware that the information is held by or for another public authority, it shall, as soon as possible, transfer the request to that other authority and inform the applicant accordingly or inform the applicant of the public authority to which it believes it is possible to apply for the information requested;

(b) the request is manifestly unreasonable;

(c) the request is formulated in too general a manner, taking into account Article 3(3);

(d) the request concerns material in the course of completion or unfinished documents or data;

(e) the request concerns internal communications, taking into account the public interest served by disclosure.

Where a request is refused on the basis that it concerns material in the course of completion, the public authority shall state the name of the authority preparing the material and the estimated time needed for completion.

2. Member States may provide for a request for environmental information to be refused if disclosure of the information would adversely affect:

(a) the confidentiality of the proceedings of public authorities, where such confidentiality is provided for by law;

(b) international relations, public security or national defence;

(c) the course of justice, the ability of any person to receive a fair trial or the ability of a public authority to conduct an enquiry of a criminal or disciplinary nature;

(d) the confidentiality of commercial or industrial information where such confidentiality is provided for by national or Community law to protect a legitimate economic interest, including the public interest in maintaining statistical confidentiality and tax secrecy;

(e) intellectual property rights;

(f) the confidentiality of personal data and/or files relating to a natural person where that person has not consented to the disclosure of the information to the public, where such confidentiality is provided for by national or Community law;

(g) the interests or protection of any person who supplied the information requested on a voluntary basis without being under, or capable of being put under, a legal obligation to do so, unless that person has consented to the release of the information concerned;

(h) the protection of the environment to which such information relates, such as the location of rare species.

The grounds for refusal mentioned in paragraphs 1 and 2 shall be interpreted in a restrictive way, taking into account for the particular case the public interest served by disclosure. In every particular case, the public interest served by disclosure shall be weighed against the interest served by the refusal. Member States may not, by virtue of paragraph 2(a), (d), (f), (g) and (h), provide for a request to be refused where the request relates to information on emissions into the environment.

Within this framework, and for the purposes of the application of subparagraph (f), Member States shall ensure that the requirements of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data are complied with [1].

3. Where a Member State provides for exceptions, it may draw up a publicly accessible list of criteria on the basis of which the authority concerned may decide how to handle requests.

[1] OJ L 281, 23.11.1995, p. 31.

4. Environmental information held by or for public authorities which has been requested by an applicant shall be made available in part where it is possible to separate out any information falling within the scope of paragraphs 1(d) and (e) or 2 from the rest of the information requested.

5. A refusal to make available all or part of the information requested shall be notified to the applicant in writing or electronically, if the request was in writing or if the applicant so requests, within the time limits referred to in Article 3(2)(a) or, as the case may be, (b). The notification shall state the reasons for the refusal and include information on the review procedure provided for in accordance with Article 6.

Article 5

Charges

1. Access to any public registers or lists established and maintained as mentioned in Article 3(5) and examination *in situ* of the information requested shall be free of charge.

2. Public authorities may make a charge for supplying any environmental information but such charge shall not exceed a reasonable amount.

3. Where charges are made, public authorities shall publish and make available to applicants a schedule of such charges as well as information on the circumstances in which a charge may be levied or waived.

Article 6

Access to justice

1. Member States shall ensure that any applicant who considers that his request for information has been ignored, wrongfully refused (whether in full or in part), inadequately answered or otherwise not dealt with in accordance with the provisions of Articles 3, 4 or 5, has access to a procedure in which the acts or omissions of the public authority concerned can be reconsidered by that or another public authority or reviewed administratively by an independent and impartial body established by law. Any such procedure shall be expeditious and either free of charge or inexpensive.

2. In addition to the review procedure referred to in paragraph 1, Member States shall ensure that an applicant has access to a review procedure before a court of law or another independent and impartial body established by law, in which the acts or omissions of the public authority concerned can be reviewed and whose decisions may become final. Member States may furthermore provide that third parties incriminated by the disclosure of information may also have access to legal recourse.

3. Final decisions under paragraph 2 shall be binding on the public authority holding the information. Reasons shall be stated in writing, at least where access to information is refused under this Article.

Article 7

Dissemination of environmental information

1. Member States shall take the necessary measures to ensure that public authorities organise the environmental information which is relevant to their functions and which is held by or for them, with a view to its active and systematic dissemination to the public, in particular by means of computer telecommunication and/or electronic technology, where available.

The information made available by means of computer telecommunication and/or electronic technology need not include information collected before the entry into force of this Directive unless it is already available in electronic form.

Member States shall ensure that environmental information progressively becomes available in electronic databases which are easily accessible to the public through public telecommunication networks.

2. The information to be made available and disseminated shall be updated as appropriate and shall include at least:

(a) texts of international treaties, conventions or agreements, and of Community, national, regional or local legislation, on the environment or relating to it;

(b) policies, plans and programmes relating to the environment;

(c) progress reports on the implementation of the items referred to in (a) and (b) when prepared or held in electronic form by public authorities;

(d) the reports on the state of the environment referred to in paragraph 3;

(e) data or summaries of data derived from the monitoring of activities affecting, or likely to affect, the environment;

(f) authorisations with a significant impact on the environment and environmental agreements or a reference to the place where such information can be requested or found in the framework of Article 3;

(g) environmental impact studies and risk assessments concerning the environmental elements referred to in Article 2(1)(a) or a reference to the place where the information can be requested or found in the framework of Article 3.

3. Without prejudice to any specific reporting obligations laid down by Community legislation, Member States shall take the necessary measures to ensure that national, and, where appropriate, regional or local reports on the state of the environment are published at regular intervals not exceeding four years; such reports shall include information on the quality of, and pressures on, the environment.

4. Without prejudice to any specific obligation laid down by Community legislation, Member States shall take the necessary measures to ensure that, in the event of an imminent threat to human health or the environment, whether caused by human activities or due to natural causes, all information held by or for public authorities which could enable the public likely to be affected to take measures to prevent or mitigate harm arising from the threat is disseminated, immediately and without delay.

5. The exceptions in Article 4(1) and (2) may apply in relation to the duties imposed by this Article.

6. Member States may satisfy the requirements of this Article by creating links to Internet sites where the information can be found.

Article 8

Quality of environmental information

1. Member States shall, so far as is within their power, ensure that any information that is compiled by them or on their behalf is up to date, accurate and comparable.

2. Upon request, public authorities shall reply to requests for information pursuant to Article 2(1)b, reporting to the applicant on the place where information, if available, can be found on the measurement procedures, including methods of analysis, sampling, and pre-treatment of samples, used in compiling the information, or referring to a standardised procedure used.

Article 9

Review procedure

1. Not later than 14 February 2009, Member States shall report on the experience gained in the application of this Directive.

They shall communicate the report to the Commission not later than 14 August 2009.

No later than 14 February 2004, the Commission shall forward to the Member States a guidance document setting out clearly the manner in which it wishes the Member States to report.

2. In the light of experience and taking into account developments in computer telecommunication and/or electronic technology, the Commission shall make a report to the European Parliament and to the Council together with any proposal for revision, which it may consider appropriate.

Article 10

Implementation

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 14 February 2005. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

Article 11

Repeal

Directive 90/313/EEC is hereby repealed with effect from 14 February 2005.

References to the repealed Directive shall be construed as referring to this Directive and shall be read in accordance with the correlation table in the Annex.

Article 12

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

Article 13

Addressees

This Directive is addressed to the Member States.

Done at Brussels, 28 January 2003.

For the European Parliament	*For the Council*
The President	*The President*
P. COX	G. PAPANDREOU

ANNEX

CORRELATION TABLE

Directive 90/313/EEC	This Directive
Article 1	Article 1(a) Article 1(b)
Article 2(a) Article 2(b) — — — —	Article 2(1) Article 2(2) Article 2(3) Article 2(4) Article 2(5) Article 2(6)
Article 3(1) Article 3(2) Article 3(3) Article 3(4) — — —	Article 3(1) and Article 3(5) Article 4(2) and Article 4(4) Article 4(1)(b), (c), (d) and (e) Article 3(2) and Article 4(5) Article 4(1)(a) Article 3(3) Article 3(4)
Article 4 —	Article 6(1) and Article 6(2) Article 6(3)
Article 5 — —	Article 5(1) Article 5(2) Article 5(3)
Article 6	Article 2(2)(c), Article 3(1)
Article 7 — — —	Article 7(1), (2), and (3) Article 7(4) Article 7(5) Article 7(6)
—	Article 8
Article 8	Article 9
Article 9	Article 10
Article 10	Article 13
—	Article 11
—	Article 12

The Kolontár Report

CAUSES AND LESSONS FROM THE RED MUD DISASTER

The Kolontár Report

CAUSES AND LESSONS FROM THE RED MUD DISASTER

Budapest, March 2011

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Contents

Sludge on the wall – the rushing flood reached the window tops

Foreword

It was 6th October, early in the afternoon. Wearing rubber boots covered knee deep in red mud, we were standing in the main street of Kolontár with Simon Gergely, an expert working for Clean Air Action Group. We had just finished an interview given to Al Jazeera Television on the red mud disaster, and we were waiting for the broadcasting van to make contact with the studio of ABC News. Everywhere around us, tree trunks, house walls and garden fences were all stained waist high by the permanent trace of the flood which took place two days before. Next to the railway, bulldozers were pulling apart the remains of what used to be the bridge of the Torna creek, swept away by the flood. In the gardens, the professionals from Disaster Management were trying to collect and remove red mud. It all looked hopeless for no matter where you looked, the valley of Torna creek was covered with red mud. On Arany János street, vans of TV channels formed a line reaching as far as the cultural centre. They were all there: the great press syndicates along with Austrian, German, French, Canadian, American and Arabic television crews. The world was watching Kolontár.

By now, the first shock is gone. So are the crews. News programmes stopped broadcasting images of Kolontár and Devecser, but the attention that was focused on Hungary last

October has not disappeared. The answers to all the questions raised then are still expected by many. What caused the dam break? Could the disaster have been avoided? Had MAL Co. Ltd. acted with due and proper care? Was monitoring on the part of authorities satisfactory? Are the regulations governing activities with similar levels of risk suitable, are European regulations sufficient? Who will pay for the compensation of damages and from what funds? Neither domestic or international public opinion has received satisfying answers to a large share of these questions so far. Information reported in the media was often contradictory. Official bodies, NGOs, parties including LMP tried to answer a number of particular questions. An exhaustive study, however, has not yet been not provided to the public, and a proper assessment of events calls for a thorough analysis of facts, causes and correlations. This was encouraged by the delegation of the European Green Party visiting the disaster site one week after the spill took place. The very idea of the present report was formed back then, and now the report is offered to the reader as a result of the cooperation of the European Green Party, LMP, NGOs and expert groups.

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The Kolontár disaster was, without a doubt, one of the most severe environmental disasters ever experienced in this country. Not only was it shocking because it left ten people dead, and injured one and a half hundred directly, leaving behind long term environmental and health impacts which are currently impossible to assess. But it is especially depressing to face the events when one realizes that the disaster could have been avoided. What we're dealing with is not a natural disaster, an earthquake, an inundation or a raging storm which cannot directly be prevented or avoided (even if the paramount responsibility of the consumer society as the engine of global climate change might well be recalled when speaking of the latter two). The Kolontár disaster, on the other hand, can be directly linked to human negligence, to ignoring signs, severe omissions and issues of liability. It wouldn't have happened if... if the company had switched to the dry disposal technology previously, just as it had done in the case of the Mosonmagyaróvár plant. If anyone, whether on the part of the corporation or of the competent authorities had taken the trouble to monitor the structural engineering condition of the dam and its dislocation, now proven to have been happening for years. Or if the authorities had not given permission, in 2006, for depositing ordinary waste which in fact had a pH value of 13. If the competences regarding construction authorization and inspection had been clarified. One could go on and on. The fact however is that none of these measures were taken, and as a result of these omissions, Kolontár, Devecser, Somlóvásárhely, the Torna creek and the Marcal river were flooded by red mud. Nevertheless, the issue of what could and should have been done for prevention is still of some interest. We can learn, and we must learn from the Kolontár disaster. The conclusions need to be drawn and the systematic errors leading to the disaster need to be elucidated. Naturally, there is need to identify who committed what errors and who bears moral or legal responsibility for the omissions and bad decisions. It would, perhaps, be even more important to ensure that in the future, the same mistakes and the same deficient systems do not lead to similar events in different circumstances. In Hungary there are three further red mud reservoirs beside the one in Ajka, and several dozens

of hazardous industrial sites or deposits. It is the task of the judicial bodies to allocate liability for the events. The issue of weather we learn from the disaster at Kolontár and whether we rectify the errors that had lead to it is our shared responsibility, including political decision makers, state authorities, NGOs and professional organizations.

With this report, we volunteered to sketch, based on the information available, the reasons behind the red mud disaster, and to identify the steps to be taken, if we are willing to learn from the lesson, in Hungarian and EU legislation concerning state monitoring and authorization as well as the functioning of institutions in order to minimize the risk of the occurrence of a similar disaster. Our findings indicate that there is a lot to be done. One has to face the fact that all parties concerned had committed severe omissions, including the governments and Parliaments of the past one and a half decades, Mal Co. Ltd., as well as the environmental, construction and mining authorities. The measures to be taken involve a similarly large group of stakeholders. EU regulations need to be revised, and the same holds for the Hungarian regulatory framework and legal practice.

We do not think that our report answers all the questions. We are confident that further similar reports will be made by other expert groups and governmental circles, and that these will shed light on issues which escaped our attention. The conclusions of the Report, however, call for serious action to be taken immediately. Legislators have only carried out a tiny fraction of these tasks so far. (Basically, certain provisions of Act 2010/CLXXXI can be regarded as such.) We hope this Report may contribute to rectifying omissions as soon as possible so that the risk of further disasters of a similar nature can be significantly reduced both in Hungary and in the EU.

Benedek Jávor

LMP – Politics Can Be Different

Chairman of the Sustainable Development Committee
of the Hungarian Parliament

The villages may become uninhabitable unless the soil in the gardens is recovered

Executive Summary

Regarding the spatial extent, duration and severity of impact, the dam break at 12:25 pm on 04. 10. 2010 and the red mud disaster in its wake turned out to be the greatest environmental crisis ever of Hungary and of the whole region. The spilt slurry reached the municipalities of Devecser, Kolontár, Somlóvásárhely, Somlójenő, Tüskevár, Apácatorna and Kisberzseny. The red mud contaminated the valleys of the Torna creek and the Marcal river, almost reaching the river Rába. Through the Torna, Marcal, Rába and the Moson branch of the Danube, the alkaline slurry entered the Danube, causing destruction in all the affected waters. Along the Torna and the impacted section of Marcal, practically all aquatic life was destroyed.

The disaster left 10 people dead and almost 150 injured, including local residents and the participants in the rescue operations.

The spilt mud and alkaline slurry polluted about 1,000 acres of land. The amount of the emitted pollutants was about 0.9–1 million cubic meters.

The fact that the devastation wrought by the dam break significantly exceeded the expected impact as specified in the disaster management plan can be accounted for in physical terms by the exceedingly large water content of the slurry stored in Basin X, and

from a chemical perspective by the alkalinity of the spilt liquid, which approached pH 13. The relatively high concentration of metals (arsenic, mercury, etc.) in the pollutant mix has also presented further health and environmental problems.

The Bayer process is globally the most widespread method of producing aluminium, and leads to the formation of red mud practically everywhere it is used. Currently, no economically viable and efficient solutions are available for the recovery of this slurry or tailings-like material. It is most often deposited (dumping it in the sea or in reservoirs surrounded by dams). Attempts have been made to find ways of recovering the material: red mud is used both as a raw material or an additive e.g. in manufacturing bricks, road construction and soil improvement. Furthermore, the technology for extracting metals is practically available but it is too costly. In an international context, the trend is shifting away from wet disposal technologies towards dry disposal, which poses lower risk. (Dry disposal was used in Mosonmagyaróvár until production was discontinued there.) The alkalinity of the deposited slurry is typically lower internationally than it is in Hungary. On the other hand, the dry technology about to be temporarily introduced in Ajka, a technology which involves blending in power plant gypsum, has not yet been implemented at an industrial level anywhere.

Following this unprecedented accident the authorities responded with the expected rapidity and decisiveness, but not always efficiently in the defence of human health, the environment and material assets impacted by the disaster or at risk. **One reason for the fact that intervention was not efficient enough was lack of information** (local residents and participants in the rescue operations were not informed as to the composition and pH value of the red mud, the biological effect of the slurry, the list of materials to be used in restoration and whether they were available). **The defective communication structure was a further reason** (crucial information on environmental health issues was published with a delay of several days, with significant initial inaccuracies). As a result, for several days the people impacted were on several occasions forced to make decisions potentially influencing the rest of their lives based on conflicting information (e.g. "the red mud is not harmful" vs. "the red mud is toxic and/or radioactive"). The deficiencies of governmental information characterising the first days after the accident were primarily mitigated by non-governmental organisations (Greenpeace, Clean Air Working Group, etc.), as they were the sources of communication regarding measurement data and useful health advice.

The red mud contained chromium, mercury, lead and nickel contaminants several times the limit values for ground water and drinking water, also exceeding intervention levels no longer in force. The majority of tests indicated arsenic concentration levels beyond the limits values defined for soil and sewage sludge.

In the first few days, public authorities and institutions stated, citing test results obtained decades earlier, that the composition of the red mud poses no significant health risk or environmental hazard. In the first week of damage control, the population received no factual information about either the potential radioactive impact of the pollutants or the health consequences of airborne dust pollution. The long-term effects of soil pollution on the environment and agricultural production were not communicated to residents until February 2011. Official communications involving conflicting and often unsubstantiated information was a constant feature of the remediation process.

At the same time, the first measurements made by the Hungarian Academy of Sciences clarified what environmental authorities had managed to ignore for years: "based on analysing samples taken at different locations, the reservoir spillage takes pH values in the range 11 to 14. Consequently, the red mud should be considered as an environmentally hazardous substance."

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Possibly the most important statement of the Kolontár Report is that all Hungarian authorities with a role in licensing and monitoring the accident-stricken red mud reservoir had committed errors.

- **The Central Transdanubian Environmental, Nature Protection and Water Management Inspectorate** had endorsed the classification of the deposited material as non-hazardous waste, thus significantly relaxing requirements on disposal and subsequent monitoring.

- **The authorities** endorsed the uncorroborated disaster management plan handed in by MAL Co. Ltd.

- **The Inspectorate failed to engage the competent District Mining Inspectorate** in the licensing process.

- **The notary of Ajka** had prohibited the depositing of hazardous waste in the reservoir, but **failed to take steps when hazardous waste was in fact deposited in the area.**

- Although the licensing of mining waste deposits has been the competence of the Mine Supervision since 2008, **the competent District Mining Inspectorate did not check the structure of the disposal site for technological compliance, and failed to enforce use of the best available technology with regard to disposal** (conversion to dry technology).

- **None of the authorities substantially considered the risk of a dam break.**

- When the privatisation contract was concluded, IPPC and BAT requirements were not taken into consideration. Neither was compliance with these requirements subsequently enforced in an exhaustive manner by either the environmental or the construction authorities.

Regarding the occurrence and the severity of accident, a decisive factor was the Hungarian authorities' failure to treat the red mud deposited together with the slurry as hazardous waste in the course of the licensing and inspection process, even though the alkalinity of the material in the reservoir that was later damaged would have justified this. Licensing hazardous waste disposal entails imposing stricter standards and the participation of more au-

thorities than is required for treating non-hazardous waste. A more thorough procedure might have shed light the technological risks of the landfill and the deficiencies of the emergency plan.

The company acting as the landfill operator bears liability for classifying the deposited material as non-hazardous at the time of applying for the integrated environmental permit, even though the alkalinity levels clearly met the criteria for hazardous waste. The company also bears partial liability in failing to meet the environmental requirements specified in the privatisation contract fully and on time. Similarly, the company bears partial liability for failing to ensure the transition (or the preparation for the transition) to a dry depositing technology, at the latest, by the time of requesting the integrated environmental permit. Though it is at present an open question, local reports suggest that the company might have become aware of the stability problems of the reservoir (local residents reported works carried out in August and September to reinforce the wall of Basin X), but failed to notify any of the official bodies.

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Furthermore, the occurrence of the accident can be linked to regulatory anomalies owing to the fact there had been deficiencies in adopting and properly implementing EU legislation.

The relevant Hungarian legislation only partially matches "Directive 2008/98/EC on waste requirements". Though it should have entered into force by 12.12.2010, the Directive was not fully implemented in Hungary. **An important fact concerning the issue of the responsibility of authorities is that the waste treatment plant belongs to the competence of the Mine Supervision under Hungarian legislation. The directive cited imposes an obligation of regular monitoring on the operator, to be carried out at least annually with regard to both the condition of the built structure and of the waste, but this obligation was not fulfilled in practice.**

According to the Act on the Environment, the permit-holder (along with the owners and managers of legal entities which cause harm) has increased responsibility for damages incurred through use of the environment, a responsibility which may only be limited, or transferred under very strict conditions. However, these general rules apparently come short of providing for adequate and available financial means needed to cover for the damage incurred. **According to the Act adopted in 1995, the rules governing the obligation to provide a security deposit and to establish dedicated reserve funds in the course of the environmental licensing process and the rules on liability insurance policies shall be laid down in a government decree. This objective has only been formally met so far.**

On the whole, the EU legislation examined in the present analysis, provided it is adopted and implemented in line with the intent of the legislator, seems suitable for the prevention of similar accidents and for managing the consequences thereof. At the same time, there is a need to adopt uniform classification criteria for hazardous waste, unified EU-wide regulation governing security deposits and liability insurance (at least for reasons concerning competition law), and a common EU environmental emergency fund set up to cover environmental damage that can not be remedied otherwise.

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It is not possible to account for the Kolontár red mud disaster by means of a single cause. Among the potential causes and preceding events, the following should by all means be noted:

- **The conditions of privatization:** it was with reference to the obligations of environmental protection that the buyer was able to acquire the Ajka Aluminium plant at a very low price. However, these obligations were not properly regulated within the contract, and there were also gaps in monitoring implementation. Moreover, the authorities allowed on more than one occasion for the owner to postpone meeting these obligations.

- **Deficiencies in monitoring environmental damage-limitation:** the privatisation contracts contained an obligation to provide for environmental damage-limitation, but the monitoring of how this was implemented was deficient. No detailed documentation is available, except for written records to the effect that invoices were presented as evidence for compliance without technical inspection having taken place;

- **Outdated disposal technology:** when the first red mud reservoirs were established, the technology of wet disposal for red mud was still widespread, but much safer dry processes were already available by the time the permit for Basin X was granted, and the integrated environmental permit for the reservoir was granted;

- **Incorrect classification of red mud waste:** when the integrated environmental permit was granted, red mud was not classified as hazardous waste, even though it clearly counted as such on the basis of its pH value under the Hungarian and EU legislation then in force;

- **licensing and monitoring malpractice on the part of administrations:** following the disaster, a court ruling was required to clarify which authority should have granted a permit for the dam building at the reservoir and carried out static stability inspection of the built structure;

- **the sinking of the dam (which could also be related to posterior slurry walling):** satellite images clearly show that the barrier sank in certain places at a rate of 1 cm / year, creating maximum shear stress precisely at the section where the dam finally broke, while the sinking itself might have occurred because of the slurry walling, or because of the dam base and subsoil becoming soaked due to the slurry walling. However, no use was made of the satellite imagery in the structural engineering inspection of the dam, even though they were continuously available;

- **Negligence on the part of company management, the authorities and government officials:** several NGOs had previously protested about the lack of environmental protection developments and the failure to carry out inspections. Their comments had no practical consequences at all.

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The Ajka red mud disaster was unique due both to its nature and its dimensions. At least part of the lessons learned from similar industrial accidents remain valid:

- The costs of remediation are eventually borne by the state, with the companies responsible for incidents almost always backing out of the process to a greater or smaller extent,

- Compensation for damages only takes place in the long run, with both the range of individuals eventually receiving compensation and its extent far more limited than that originally promised,

- Personal and institutional responsibility is identified in the rarest of cases,

- The impact of environmental damage typically lasts longer than was originally estimated.

The trace of pollution ont he wall —with the ruptured dam in the background. The residents were forced to escape through the roof

1. Antecedents

1.1. Aluminium industry and Alumina production in Hungary

On the territory of historical Hungary, intensive research for ores started in the beginning of the 1900s. The mining of bauxite, first reported in Bihar county, reached an industrial scale as early as the first World War. Around 1920, large quantities of bauxite were found in the Vértes and Bakony mountains. Mining at an industrial scale started in 1926 at the bauxite quarry at Gánt.

The first Hungarian alumina plant, constructed in Mosonmagyaróvár, started operations in 1934. Before this time, Alumina was manufactured with Hungarian bauxite as raw material in Germany. Within a few years, aluminium was also manufactured in Csepel. Partly as an answer to heightened demand for Alumina and aluminium as a consequence of the German war effort, construction of the Alumina plant and aluminium furnace at Ajka was started in 1941. The planned capacity of the Alumina plant was 20 kt/year, that of the aluminium furnace was 10 kt/year. The Ajka thermal power plant was constructed next to the aluminium company, providing water vapour for the aluminium furnace and electric energy for the Alumina plant.

The plant and the furnace started to operate in 1943, though neither reached the planned capacity levels before the reconstruction following the second World War.

At the time of forced industrialization and the war economy, aluminium was a metal of strategic importance: one of the most important raw materials for (partly, military) airplane construction. The whole of this priority industry was covered by MASZOBAL Ltd. (Hungarian-Soviet Bauxite Aluminium Ltd.), established on January 1, comprising by the bauxite mines at Gánt, Iszkaszentgyörgy, Halimba and Nyirád, the Alumina plant and aluminium furnace at Ajka, the light alloy rolling mill at Székesfehérvár, the Almásfüzitő Alumina plant, the Bauxite Research Lab at Balatonalmád, the Viktoria Chemical Plant,to which were added, from 1952 on, the Aluminium rolling mill at Kőbánya, the Aluminium furnaces at Tatabánya and Inota, as well as the Alumina and Alundum (Borolon) Plant at Magyaróvár. MASZOBAL was dismantled at the end of 1954, as the Hungarian State redeemed the totality of the property of the Soviet state, and went on to establish the Aluminium Trading Company, controlled by the Ministry. Its supervision was exerted by the Ministry for Heavy Industry (NIM), then by the Chief Department for Non Ferrous Metals in the NIM until June 1963. The main tenet of the Hungarian-Soviet Treaty on Alumina and Aluminium was that "further exploitation of the Hungarian Bauxite riches, needs to be secured by joining one of the most favourable alumina production opportunities in the socialist camp with the cheapest and most efficiently available electric energy base, in a way that it is an optimal solution for both the countries participating in the co-operation and the whole of the socialist camp". According to the treaty, Hungary accepted to ship a continuously growing amount of Alumina between 1967 and 1980, gradually reaching 330,000 tons to the Soviet Union. According to the plans, the alumina is processed there, and the aluminium produced is shipped back to Hungary. Soviet metal shipments – equally growing gradually – reached 165 thousand tons by 1980. In the framework of the Soviet-Hungarian Treaty on Alumina and Aluminium, it was not the electricity required for processing, as it could have been more rational, but the alumina was shipped to the Soviet Union. Simplifying somewhat, the construction can be described as outsourced smelting. The price of alumina and aluminium was accounted for the Hungarian-Soviet border, the Soviet party financing the transportation within the Soviet Union. Most of the costs of smelting were paid for with Hungarian industrial products, creating a market for Hungarian industry goods.

The heavy industry minister in 1963 founded a single organization for Hungarian Aluminium Industry, the Hungarian Aluminium Industry Trust (MAT), which integrated the constantly growing firms in the sector until the regime change. In September 1988 an agreement was reached that abolished the Soviet-Hungarian Treaty on Alumina and Aluminium in 1990, and cooperation in the MAT in the period 1991-1995 was carried out as a business venture. ON 31 March 1991, trust were transformed into corporations, and the MAT was transformed into 100% state owned joint-stock HUNGALU on 31 December 1991. On June 30 1991, State Property Agency (AV Rt) became the owner of MAT. In 1990, the Nyirád Bauxite mine closed, while the aluminium furnaces at Tatabánya and Ajka stopped production in 1991. Similarly, production was stopped at the Ajka furnace in 1992, and capacities were decreased in other alumina plants in the country during 1993, with the Almásfüzitő Alumina Plant closing down in 1994. Privatization seemed to be the only option to prevent the total collapse.

1.2. Privatization in the aluminium industry

1.2.1. Selling the productive companies of the sector

At the time of the government decree in 1995 deciding about privatization, maintaining operability and financing loss-making management in the sector would have needed billion-scale financial commitment from the state, let alone the environmental problems caused by the red mud accumulated during the decades. In the beginning of the nineties (between 1991 and 1993) demand for aluminium fell sharply, its price on the global market reached a historic nadir, the Russian market collapsed for bankruptcy, in addition it was apparent at the time that the operational costs of energy-consuming aluminium smelters (partly due to the privatization of the energy sector in progress at the time) would jump. In the meantime, the report about the privatization concept, compiled for the general assembly of HUNGALU Rt. on May 15, 1995 claims that "from the middle of 1994, aluminium prices on the global market increased significantly, and from the beginning of 1995 the price of alumina products has also moved favourably. After a five-year decrease price revenues will start to increase in 1995, even on a real value." Therefore the unfavourable present situation had to be considered against good prospects. Finally the government's short-sightedness and tight-fisted attitude won: as there was no intention to spend money from budgetary resources on the aluminium industry, the government decided to sell the sector. However, as we look back now it seems in this case this was a "guided privatisation", pertaining the pretence of competition, the government selected the owners they found favourable, and ensured advantageous conditions for the favoured owner groups so that they can obtain the complete aluminium industry, from mining through processing to production and trade.

Before the privatisation of HUNGALU, in May 1995 the Minister of the Industry dismissed board director Ervin Ernst and C.E.O. Péter Keresztes, and appointed Árpád Bakonyi as board director, who was often mentioned in the news concerning the Kolontár disaster and Pál Szabó as C.E.O. (who later became known by the public as the head of the Hungarian Post and the Hungarian Railways, and then the minister responsible for infrastructure). Thus persons were appointed to lead HUNGALU, who later appeared in the privatised companies as owners, managers, board members and supervisory board members. Árpád Bakonyi, together with Lajos Tolnay and Béla Petrusz has been an owner of great influence at MAL Zrt. However, there is another group in the most important companies of the Hungarian aluminium industry, which obtained ownership during the Horn government, and relates to later Prime Minister Ferenc Gyurcsány and Altus Rt.

The idea of an apparent guided privatisation is also confirmed by the fact that although foreign companies were also interested in the offer (e.g. a consortium established by Norwegian Hydro-Aluminium and Slovakian ZSNP entered the privatisation tender of Ajka Aluminium Industry Ltd. (Ajkai Alumíniumipari Kft.)), only one element of the HUNGALU property was sold to a foreign buyer on its actual market price. Alcoa took over the Light Metal Works in Székesfehérvár (Székesfehérvári Könnyűfémmű Vállalat) for 6.5 bn HUF, while another outstanding element of the stake, Mosonmagyaróvári Timföld és Műkorund (Motim) Rt. was taken over by Altus, owned by Gyurcsány, (together with the management) for 705 million HUF.

The present ownership structure in the Hungarian aluminium industry was established in a relatively complicated process. According to the first privatisation contract, in 1995 HUNGALU Magyar Alumíniumipari Rt. (HUNGALU) sold its stake in Balassagyarmati Fémipari Kft. (Balassagyarmat Metal Industry Ltd.) to Altus Befektetési és Vagyonkezelő Rt. (Altus Investment and Property Management Plc.) (Altus) and Tíz-M Szervezési, Vagyonkezelési és Szolgáltató Kft. (Organisation, Property Management and Service Ltd.) The second contract was concluded on December 21, 1995, in which HUNGALU sold 90 per cent stake of Magyaróvári Timföld és Műkorund Kft. (Motim) to Altus and GPS Vagyonkezelő és Gazdasági Tanácsadó Kft. (GPS Property Management and Business Counselling Ltd.), established by the heads of MOTIM at the time, in fifty-fifty per cent. The third contract was concluded in spring, 1996, in which HUNGALU sold Metalucon Fémszerkezeteket Gyártó és Forgalmazó Kft. (Metalucon Metal Structure Manufacturing and Trading Ltd.) to MMB Finance Befektető és Kereskedelmi Kft. (MMB Finance Investment and Trade Ltd.). The fourth contract was concluded on May 8, 1996, in which HUNGALU sold 90 per cent of Inotai Alumínium Kft. (Inota Aluminium Ltd.) to Magyar Aluminium Kft. (Hungarian Aluminium Ltd.) (MAL). The fifth contract was concluded on August 16, 1996, in which HUNGALU sold a 72 per cent stake of Bakonyi Bauxitbánya Kft. (Bakony Bauxite Mining Ltd.) to Fak-Top Kft.- MAL, MOTIM (actually Altus) and Metalservice Rt. According to the sixth contract, also on August 16, 1996 HUNGALU sold 90 per cent of Köbal Kőbányai Könnyűfémmű Kft. (Köbal Kőbányai Light Metal Works) to MAL. With the seventh contract signed on December 19, 1996 HUNGALU sold a 90 per cent stake of Almásfüzitői Timföld Kft. (Almásfüzítő Alumina Ltd.) to HUNGALUmina Vagyonhasznosító és Kereskedelmi Kft. (HUNGALUmina Property Exploitation and Trade Ltd.), which had been renting the plant stopped in 1994 since 1995, and later the complete machinery of the company. In July 1997, an eighth contract was concluded by which HUNGALU sold a 90 per cent stake of the Ajkai Alumíniumipari Kft. (Ajka Aluminium Industry Ltd.) to Inotai Alumínium Kft. (Inota Aluminium Industry Ltd.) (or actually, to MAL. The last contract, the ninth, signed on November 17, 1997 HUNGALU sold HUNGALU Kereskedelmi Kft. (HUNGALU Trade Ltd.) to MAL and Motim (Altus). Each contract contained business (employment, capital increase, development) and environmental commitments.

In the times of the Orbán government, the supervisory committee of the State Privatisation and Property Management Plc. compiled a report about the privatisation of the aluminium industry, which claimed "the Hungarian state suffered a significant loss in the course of the sale of the company [a HUNGALU]", worth approximately 25 billion HUF. The damage was mostly attributed to the sale of the companies below their actual price.

The privatisation contracts were classified during the Horn government, and they have just been disclosed, after the accident, on the urge of Politics Can Be Different, following several addresses in Parliament[1] and press releases.[2] For the experts the contracts themselves and the conditions of the conclusion of the contracts are controversial.

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[1] See: http://www.parlament.hu/internet/plsql/ogy_naplo.naplo_szoveg?P_CKL=39&p_uln=35&p_felsz=116&p_szoveg=&p_stilus=

[2] Let's start the revision of privatization contracts with MAL Co. Ltd.
http://lehetmas.hu/sajtokozlemenyek/8293/privatizacios-szerzodesek-felulvizsgalata-kezdjuk-a-mal-zrt-vel/
On whose behalf keeps Government the MAL contract a secret?
http://vorosiszap.lehetmas.hu/hirek/108/kiert-titkolja-a-kormany-a-mal-szerzodest/

a) The contracts were compiled by the law firm Eörsi and partner (the firm of former SZDSZ MP Eörsi Mátyás). The texts are quite similar, they often overlap, contain repeating turns, when the texts were compiled, the peculiarities of the companies were not taken into consideration (especially with respect to environmental commitments, where almost all the contracts contain the same paragraphs).

b) The contracts published have not been signed. It seems for the Orbán government the protection of personal rights is more important than the public interest to know who and why decided about the wording of these contracts.

c) A returning element in all the contracts is that a report has to be compiled each year until March 31 about the progress of the environmental damage management (and in case the rate of the progress is behind the rate set forth by the environmental authority, a penalty shall be paid). In the meantime, based on the documents available it cannot be found whether anybody obeyed this requirement (only the fact at the environmental authority in charge for the region the companies concerned presented invoices proving they had worked on damage repairs, which was approved by the authority as a performance certificate).

d) From all the contracts, the third (about the sale of Ajkai Alumíniumipari Kft.) contains the most controversial elements. On one hand, HUNGALU remitted a 2.7 billion loan. On the other hand the price was actually only 10 million HUF (namely 90 per cent of the equity, a stake with a nominal value of 1591.040 million HUF was given to the buyer for 10 million forints). Based on point 6.2 of the contract, "the Company (Ajka), based on the agreement with the Buyer shall act as bailer. The Seller (HUNGALU) shall decide, whether it will validate its claim towards the Company and/or Buyer." In the meantime, the debt of Ajkai Alumíniumipari Kft., which was bigger than the equity was released, and took over the debts towards third parties as a commitment, and also took up that in case of the dissent of outsider parties, and in order to able to pay its overdue loans, almost on stock market level. In other words, the buyer took over a 90 per cent stake of a de facto sound company, for 10 million forints.

The contract estimates the costs of the damage remedy in the given circle at 3.3 billion HUF, in the meantime claims that this includes a 2,200,000 ECU (approximately 400 million forints on the exchange rate of 1997) PHARE project, and the biggest project, the recultivation of the abandoned depositories (together with the depositories), stayed at HUNGALU, therefore MAL should not spend much on environmental protection HUNGALU. From the contract it does not turn out why the price was decreased to such an extent eventually.

1.2.2. Transferring environmental responsibilities

The privatisation of the aluminium industry was called a success story in a report prepared for the Horn government by Judit Csiha. Its success is far from being obvious. The income from the sales amounting to HUF 9 to 10 billion was continuously spent on maintaining the emp-

loyment levels of the companies and keeping them functioning as well as on environmental damage control. So finally the state made no profit from privatisation while it was stuck with a range of environmental obligations and risks for decades. On 1996 price levels the privatised companies took an obligation to invest 11 million HUF n the form of the environmental investment, which would add up to HUF 30 million on 2009 price levels. The impacted companies on the other hand didn't even approach this amount in their actual environmental investment. The environmental obligations related to Ajka were specified in the Privatisation Contract, but in a vague form that would not faster accountability, without any specific details. The main environmental items of the privatization contract of Ajka Aluminium Industry ltd. could be found in section 4.2 of the contract. All environmental damage in fact identified so far or in the future, shall be eliminated following consultation with the environmental authority (to the extent and pace agreed upon) …on its expense or at the expense of the Association… the buyer agrees to accept the sanctions as well as the provisions of point 3 of Government decree 2263/1995. (IX.08.) with respect to the purchaser. (This government decree went out of force from 01 July 2001. {Government decree 2166/2001. (VI. 29.) on annulling decrees from the series 2000. 1. "The government terminates regulations made by the Council Of Ministers and government decrees specified in the appendix to this decree."}

In the privatisation contract of the Ajka plant, among others, references are often made to point 3 of government decree2263/1995. (IX.08.), as a text where the environmental obligations are defined, but in fact this point failed to include specific details.

2263/1995. (IX. 8) Government Decree
...

3. The Government considers it necessary to settle environmental problems in the aluminium industry. To this end,

a) HUNGALU shall create an environmental damage assessment and damage control plan for its societies. The environmental condition of the settlement shall be presented in the plan, proposals for damage control and the anticipated costs should be included;

b) HUNGALU shall fulfil the tasks set out in the plan approved by the regionally competent Environmental Inspectorate tasks performed by an. In case of a delay of more than a year, it shall transfer the coverage of the costs required to the Central Environmental Protection Fund.

The privatisation contract and the government decree formulated the following major environmental obligations:

- *Consulting with the regional competent environmental authority, the company shall develop an environmental damage control program and a road map for it.*

- *The environmental audit identified environmental damage amounting to HUF 3.3 Billion, over and beyond the PHARE project (a reference to the construction of a slurry wall to avoid further damage), added as the appendix of the contract. Failing to adhere to the programme endorsed by the environmental inspectorate, the company shall pay a penalty amounting to 10 percent of the value of the damage.*

- *Yearly damage control reports shall be sent to the privatisation authority or it legal successor.*

- *The PHARE project amounting to ECU 2.2 million shall be implemented by the seller.*

1.2.3. Omitting recultivation of the red mud reservoirs

On site inspection of the realisation of environmental investment on the part of the environmental authority took the form of checking that the invoices representing work carried out were handed over (cf. the Minutes page of the contract SZT 25561 with subject MOTIM). Thus in fact it had been unilateral acceptance of invoices without inspection.

The most costly of the environmental tasks would have been the creation of a safe disposal technology and the recultivation of existing reservoirs. The Kolontár accident could occur because neither of these large scale measures was fully implemented.

The National Development Agency carried out fieldwork in the region of AJKA. On 27 September and from 26 to 28 October, 2005. Based on this field work, a report was prepared, entitled the role of the national development plan in the development in the Ajka small region. The document has the following to say: „A large amount of tailings, especially in the form of red mud were accumulated in the region of Ajka. With the progress of technology this substance can become the raw material for new industrial activities. Until that point however it reduces environmental potential."

The report carried out nine years after the privatisation in 2005 mentions the following points among the recommended improvements and the expected costs: "Recultivation of redbud reservoirs in Ajka, Ajka, HUF 600.000.000". As a further item amount in HUF 50 million, appears protection of the water base of the Marcal river, primarily threatened by the red mud reservoirs.

14.5 billion m^3 of red mud was stored in the slurry basins of the Ajka aluminium plant before flood ending in environmental disaster. It is a fact that recultivation of the slurry reservoirs have only partially been implemented so far even thought the state declared being satisfied with the environmental performance of MAL Co. Ltd. on several accounts and never claimed the penalty that was provided for in the privatisation contract. At the same time, the political elite of all times proved friendly to the owners of the company. For example, Lajos Tolnay was invited to take part in the consultation referred to us "national consultation" as a member of a restricted consultation body let by George Matolcsy. The national consultation was a program of Viktor Orbán than in opposition. Even more strikingly, based on a decision by Minister of the Economy, George Matolcsy, the government decided to give the company

a national quality award in 2000. In a message the prime minister sent for the celebration at the award ceremony, he used the following words: the owners and employees of the company can be proud to be the stakeholders of an enterprise that represents the state of the art of Hungarian economy. Through their quality performance, they show the path for others. In the case of MAL this "quality performance" was made possible by only partially carrying out the remediation of hazardous waste produced in the past or during every day production, and due to the fact that not having to cover this significant part of the expenses, it was provided a competitive advantage compared to other companies taking their environmental obligations more seriously.

This naturally required cooperation on the part of the company and the environmental authority and, in addition, very liberal inspection and licensing behaviour on the part of the latter. It is a characteristic example that the Central Transdanubian Environmental Inspectorate gave permission in 2009, i.e. one year preceding the accident to raise the height of the dams of basin 8 which had already been closed and recultivated, and basin 9, closed but still kept under water and furthermore gave permission to reopen them as active reservoir basins.

1.3. Hazardous waste disposal

1.3.1. Hazardous waste in Hungary

According to data from the National Waste Management Plan, about 70 million tons of waste is produced in Hungary in a year. This quantity includes all waste created in the course of production, distribution and consumption, as well as processed plant leftovers and biomass used, for the most part, in agriculture. About 5% of the amount indicated is hazardous, while the remaining 95% consists of 10% of inert waste (construction and demolition waste, as well as waste products form the manufacturing of materials used in construction). 90% of industrial waste represents slag from power plants and the metal industry, mine slurry as well as industrial waste water sludge and sludge from water treatment. The rest of the remaining quantity includes waste similar to industrial waste generated through distribution (commerce, services).

About one fifth of 3.4 million tons of the hazardous waste produced is red mud resulting from alumina production. About 1.5 million tons of hazardous waste from the processing industry, the largest share of which is represented by tailings and slurry from metal smelting and processing as well as the processing and utilization of crude oil. A further one million ton is made up from combustion residues from power plants and waste incinerators. Naturally, hazardous waste is equally generated by agriculture and the food industry, as well as by the population and services. 10% of hazardous waste is generated by plants and animal. About 0.7 to 1 % of solid municipal waste is hazardous.

Under Hungarian regulations, it is primarily the producer or the owner at all times who bear responsibility for waste management, including the collection for later management, utilization and neutralization of the waste. This responsibility can be fulfilled by meeting the requirements specified by regulations, and in line with the polluter pays principle, either through waste management (an activity subject to licensing) or through paying for the services

of a licensed operator. In cases governed by separate regulations, the responsibility of waste management and the costs is borne by the producer generating the waste. As a consequence, prevention is equally the responsibility of the producer of the waste; the legal environment, however, provides only minimally efficient indirect incentives. The quantity of the waste produced is (slowly) decreasing, but this is explained by a decline of the economy and in production levels rather then premeditated prevention levels , especially in the first part of the 1990s. Today, the ongoing structural modification of industry and accompanying product and technology development entail the generation of lower amounts of waste, with decreased hazard levels, in part owing to stricter environmental regulations.

The rate of waste utilisation is significantly low in an international comparison, especially for hazardous waste, the utilization of which does not even reach 20%. Management of the waste produced is typically neutralized, mostly in the form of dumping. The proportion of the latter exceeds 50%, not including waste generated in agriculture. Added together, physical, chemical, biological and thermal neutralisation of the waste, barely represents 20% even including incineration, and almost half of this amount is liquid municipal waste processed in waste water treatment plants or poured in the sewage system. Thermal neutralization amounts to 6%, while physical-chemical neutralization, mostly consisting of the treatment of chemical waste, represents 4 %. About 75% of hazardous waste and about 60% of industrial waste, more than four fifths of solid municipal waste and about half the sewage sludge is deposited in landfills or subjected to long term storage in the area of production. Regarding industrial waste, it is mostly waste products from power plants, metallic industry and mining, produced at a large scale, that is deposited in landfills in the neighbourhood. Thermal neutralization of hazardous waste has a capacity of 85 thousand tons yearly, one third of which provided by small capacity hospital incinerators and waste oil incinerators.

Careless economic and waste management practice in past decades, and much more lax regulations than today, with illegal dumping on several occasions resulted in contaminated areas created over many places. About 500 million tons of industrial waste has been accumulated, deposited, for the most part closed and recultivated reservoirs. 99% of this material comes from the mining industry, iron production, electricity generation and the construction industry.

The total amount of bauxite residues produced and deposited in the course of Hungarian alumina production equals 35 million tons. Only 0.3% is deposited is reused in a year though the capacity for utilization is available for many times this quantity. About 7% of the waste accumulated in landfills is today classified as hazardous, about 90% of which is red mud and the rest consisting of drilling sludge. The quantity of hazardous waste entailing direct hazards deposited in ways which fail to meet contemporary depositing regulations represents about 270 thousand tons (several million tons including red mud).

The producers and managers of waste have to maintain accurate documentation of the waste managed on the basis of measurements, regarding the transport, treatment of the waste as well as the functioning of the operating facilities. Based on this documentation, they have to publish statistical and administrative reports to the authorities with data content specified by regulations. The documentation and the data reported provide the basis for monitoring what happens to the waste. On the other hand, the appropriate plans and forecasts can only be made on the basis of the assessment and analysis of the data thus produced.

There are different systems for the administration and processing of the data that are only partially harmonized, and are at times incomplete. The most complete information system on hazardous waste is operated by the ministry for rural development, based on mandatory comprehensive reporting on the part of producers and managers of hazardous waste. In the case of non hazardous waste that can be stored together with hazardous and municipal waste, the polluter plays principle is realized in theory: the costs are paid for by the producers of the waste. The Kolontár disaster has shown, however, that it is not fully realized in practice: the producer of the waste in Ajka has not paid for secure depositing and storage (using a cheaper and less secure technology) and it fell on the state (i.e. the community of taxpayers) to pay for the disaster, the impact of which was more serious than expected. The same was proven by chemical residues in Garé, waste with heavy metal content in Nagytétény, gas mass in Budafok and Üröm, dye production residues in Újpest and galvanic sludge in Csepel. The number and volume of cases indicates that the present regulatory environment concerning the licensing and inspection practice of authorities is not suitable for the prevention of hazardous waste related disaster with serious health and environmental impacts, while damage control calls for billions of Forints of expenses on the part of the state.

For the sake of prevention, the issues of mandatory liability insurance and the introduction of the institution of the provision of a security deposit have been regularly raised since the 1990s (last when the Ministry of Environmental was under the direction of Miklós Persányi). The governments of all times, however, always refused the proposals, invariably on the grounds that Hungarian economic actors would not be able to bear such an extra burden. Not only does this attitude raise concerns owing to creating a similar burden for the state without undemocratically, but it is also problematic from the point of view of EU competition policy, since these environmental costs are quite common in the European economy.

1.3.2. Red mud disposal sites in Hungary

In the territory of the country, as a heritage of the aluminium industry aluminium industry with much higher capacities of former times, large amounts of red mud are stored which fall into the category of hazardous waste as in the case of Ajka.

The reservoirs near the Ajka alumina plant contain 14.5 cubic meters of red mud (with 70% solid content, thus it would be more accurate to use the expressions bauxite residue and solid phase).

The slurry reservoirs covering 200 hectares in territory of the former Almásfüzitő alumina plant are located directly next to the Danube, containing 12 million tons of waste in 7 basins.

Reservoirs next to the Ajka plant store 14.5 cubic meters of red mud. (With 70% dry matter matter, making it mors accurete to talk of bauxite resudue or solid phase).

5 million tons of red mud were accumulated in the reservoir behind the dam constructed in the valley of Kántorkerti stream near Neszmély, equally deposited by the Almásfüzitő alumina plant. The quantity of the total amount of bauxite residues closely approximates 12 million tons. Calculating with 70% solid content, this equals to 17 million tons of wet slurry.

The landfills of the Mosonmagyaróvár alumina plant, owned by MOTIM ltd, are located at a few hundred kilometres from the city. The material stored there (bauxite residues equal-

ling 3.7 tons in terms of solid content) is much more dense than the substance deposited in Ajka. After filtering, the filter cakes with 55-60% solid content were deposited in a red mud refuse by means of a special pump system. This method of storing red mud was introduced in the first half of the 1980s. The closed reservoirs were covered by 20 cm of clay and 50 cm of soil, on top of which special acacia shrubs were planted. The company spent about HUF 2 Billion on recultivation so far.

According to information published after the Kolontár disaster, the greatest environmental risk is posed by the Almásfüzitő deposits in the direct vicinity of the Danube flooding area. Out of seven slurry basins located in the area, Basin 7 remains still partially uncovered, while the others are covered and recultivated. Several tons of other hazardous wastes were also deposited (Tatai Környezetvédelmi Ltd. executed various experiments in waste neutralization.) Basin 7 was partly covered with the flying ash from the Dorog hazardous waste incinerator.

Tatai Környezetvédelmi ltd. developed new technology for the recultivation of red mud reservoirs by other hazardous waste "which solves the isolation of hazardous materials in the reservoir from the environment, along with biological treatment and neutralization of organic material and waste with metal content, taken over from various waste producers.") The compost material generated through the process is similar to natural soil with regard to its structure and composition, while being resistant to highly alkaline sludge with an elevated metal content, and thus, it is perfectly suited for covering reservoirs and planting recultivation vegetation. This technology fulfils the following objectives:

- *The elimination of the production of surface dust on top of the reservoirs.*
- *Making reservoirs fit the landscape, that is, creating conditions as close to the original as possible form the biological and visual points of view. The growth of vegetation results in living organisms gradually returning into the covered areas.*
- *The production of large quantities of a recultivation mixture suited for covering the red mud reservoirs and planting vegetation, requiring minimal long term intervention.*
- *Reducing the proportion of water filtering through, thus preventing the ablution of heavy metals chemically fixed in the red mud.*
- *The processing and utilization of organic waste through placing it in an environment where its hazardous content is significantly or completely reduced through biological decomposition.*

The North Transdanubian Environmental Inspectorate, as the environmental authority of first instance issued an integrated environmental permit along with an environmental operation permit to the Tatai Környezetvédelmi Ltd. for the application of this technology. The permits cover the red mud reservoirs of Almásfüzitő and allow for the biological neutralization of 132,000 tons of hazardous and 280,000 tons of non hazardous waste a year through composting.

The real environmental risk of the Almásfüzitő red mud reservoirs is however inherent in their location. The environment of the present slurry reservoirs had been a swampy area before the river management works. This area is now separated by a 10 km long flood protection embankment along the Danube that is identical to the red mud reservoir dam over several sections. At times of flood, the slurry reservoirs stand out of the water the way islands do. The residential areas of the villages of Kiskolónia and Nagykolónia are located near the slurry reservoirs.

At the time of establishing the red mud reservoirs, no clay layer was spread, thus the reservoirs constructed without proper protection could contaminate ground waters. When the level of the Danube is low or moderate, this contaminated water could get into the Danube due to the direction of flow of the ground water. The Territory of the present slurry reservoirs had previously been river and stream beds that still define the direction of groundwater flow. These same causes significantly reduce the stability of the dams. In the groundwater monitoring wells, situated around the slurry reservoirs, concentrations in toxic metals and fluorides have been measured several times surpassing limit value.[3]

Furthermore, the area is exposed to the threat of earthquakes. At the nearby municipalities of Komárom and Dunaalmás, several earthquakes took place resulting in entire buildings collapsing. Potential major earthquakes happening in the area could cause an environmental disaster due to the red mud getting into the Danube which could threaten the provision of drinking water to the municipalities located along the river.

1.4. Technological deficiencies

1.4.1. The condition of the dam before the accident

The processing of satellite images reconstructed the past of the dam which broke on 4 October, presently, going back 7 and half years. The investigation started at an individual researcher's initiative, was carried out with the cooperation of Dr. Gyula Grenerczy (Satellite Geodetic Observatory of the Institute of Geodesy), Dr. Urs Wegmüller (Gamma Remote Sensing, Switzerland), The European Space Agency (ESA) and of Kepler Space.

Of one of the most novel and most advanced, highly complex space geodetic method, i.e. differential and constant Synthetic Aperture Radar Interferometry (PSI) was applied in the research. The method is based on satellite radar signals sweeping the globe, with the reflected signals detected and data is stowed. Each time it passes above the ground, the satellite creates an image of the perceived radar signals reflected by the landscape, and thus on the basis of comparing the satellite measurements carried out at different times, the movement of Individual objects can be determine with high accuracy using appropriate scientific methods.

This method of investigation is special on several accounts. It is the only method for the investigation of movement that can explore the past and can thus show movement from the past, even in cases where nobody carried out measurements in the field. In the case of all other technologies, points of measurements need to be established, measurements need to be

[3] http://www.ekoku.hu/vorosiszap_sajt.pdf

carried out on site, and one needs to wait for a given period of time unto the dislocations are significant enough to be indicated. In this case however, instead of establishing local points on site and carrying out measurements, the satellites themselves have carried out all the necessary measurements years or even almost two decades ago. Thus the history of dislocation can be examined post facto, without on site work or measurement. A further advantage is that there is no need to request permissions for entering the grounds. What the satellite sees from space can be investigated regarding its movements. With this method, one can learn of the dislocation history or the stability going back eighteen years until 1992.

Regarding the red mud reservoir, the researchers first investigated the radar images made by the ASAR sensor of the ENVISAT satellite of the European Space Agency from 2001. All the images made of the impacted area were drawn into the analyses. The first image was made in March 2003, while the last one was made one and a half months before the disaster. The interferometric technology makes it possible to analyse the dislocations occurring between individual images, and thus the movement of the reflecting surfaces can be condensed in a time series. Such reflecting surfaces are for example, human structures and buildings. On the other hand, the surface of agricultural land, forests and fields, as well as water surfaces are not suitable for the examination of dislocation with the above mentioned sensors. Geometry is equally an important factor for detection, since it is necessary for reflected signal to arrive back to the antenna of the satellite. The satellite can measure the movement in the direction of observation between different moments of taking the pictures.

The satellite follows an orbit approximately North-South in direction. It has a sensor looking to the right. It sends signals at 23 degrees approximately, and detects reflected waves. If the configuration is not appropriate, the radar signal will move in a different direction, and thus will not be detected by the satellite's antenna. First images from north to south were drawn in the investigation. At a later stage of the research, the other direction will also be investigated. Since reflections can arise from other places in the case of images made from a different direction. Thus the movement will be analysed regarding more points with more details, enabling researchers to isolate horizontal from vertical movements.

Within the surface investigated, the researchers managed to identify speed and dislocation history at more than 15000 points based on the data. **The analysis showed that the system of the red mud reservoir dam has been moving significantly for years. These dislocations are not only intensive, with their extent reaching and exceeding one centimetre yearly, but also they are uneven along the dam. Some parts of the dam moved more, others moved less, and this lead to the building up constant mechanical pressures in the system of the dam. Large differences of movement concentrated in a small area could equally have resulted in the fatal rupture and burst of the dam. The dam broke at the point of both the largest demonstrated movement and the largest differentiated movement.** At a distance of 120 metres from the point of rupture, the western dam was almost stable, while its southern part showed significant dislocations as well. The results of the investigations have demonstrated that through monitoring the stability of the dam, these movements could have been demonstrated years ago. Large scale, spatially differentiated dislocations clearly indicated that it was only a matter of time until this structure bursts and breaks. Thus its stabilisation could have been provided for. The first data demonstrate that these movements went back as early as 2003. On

all the points measured, the history of movements can be reconstructed, going back 7.5 years, recorded in total in 32 different moments in time.

An investigation going back even further in time could potentially indicate whether technological interventions in the past similar to the slurry walling mentioned above could have contributed to the deterioration of the dam and to the formation of sinking leading to the exertion of shearing stress.

This series of observations provides no information on the dislocations of the northern dam which was subject to a critical worsening of conditions due to the dam break, since that structure is not located in a direction suitable for use of the satellite signalling technology. And thus no meaningful enough reflection arrives back to the satellite antenna. This however can be helped by another geometry of observation. In the next phases of the investigation, the distant past will be examined based on radar data going from 1992 to 2000, obtained by satellites ESR1 and ESR3 of the ESA. The use of a different direction of satellite orbit, and the examination of satellite images from other frequencies is also planned for. However, the highest number of observations, with the highest reliability as well as the most detailed time series are provided by the Envisat satellite presented here.

Conclusions:

- The data obtained by the Envisat satellite radars prove that the surroundings of Ajka, Devecser, and Kolontár, as well as the red mud reservoir is generally very stable The points have a speed of less than ±2 mm yearly.
- On the sections of the dam system of red mud reservoir 10, mapped by a series of satellite radar detection images, the data show significant and large-scale movement with a speed over -1 cm / year, in the 2003 to 2010 period. The ENVISAT satellite radar detection direction differs from the vertical by 25 degrees and from the western direction to the north by 12 degrees

- Data show spatially unevenly distributed movement along the dam, which indicates the continuous build-up of shearing stress within its structure. The series of observations by satellite radar show that the dam parts of which images were made moved to the largest extent in the past in the north western corner of the reservoir (-12.2 mm yearly, in the direction of the satellites, - 13.5 mm/year for sheer sinking, and -28 mm yearly for the dam moving horizontally outwards, i.e. westwards.)

- In the dam system of the red mud reservoir Basin 10 showed significant movement observed over the past years, exceeding -12 mm yearly, which equal more than -9 cm dislocation in the direction of the satellite, if the sinking itself is 10 cm, and the horizontal movement itself is 10 cm during the 7 and half years observed. These values are much higher than the margin of error of 0.3 m yearly. The speed and extent of the dislocation are significant enough to ensure that they could have been detected years ago either through on-site measurements or by space geodetic means.

- Monitoring the movements of the embankment could have drawn attention to the danger of a potential rupture in the structure, thus creating an opportunity for prevention.

- Once the researchers demonstrated the PSI satellite technology allows remote monitoring of the deformation, without any field work, not only in the present, but - going back in time, based on historical data - in the past. This technique makes it unique, and the only one that can be applied even if the threat is undervalued, the lack of control, or other reasons, measurements have been performed previously.

- The results highlight the importance of monitoring and the need for its statutory requirement.

Outlook:

These results were established based on the measurements of ENVISAT satellites. In our case, they provide the most trustworthy, and the highest number of observations, with the most detailed time series. Further investigations will shed light on the distant past based on the data as observed by previous ERS satellites, going back from 2000 until 1992. The data observed by Envisat satellite, in the other direction of flight, represents an opportunity and better resolution. And provide more precise knowledge of the spatial direction of movement of the dam, while also separating the movement components, vertically (sinking) and horizontally. This entails that the primary focus was on horizontal movement pushing the dam outwards, and creating pressure at the corners. This horizontal movement was due to the layers of sludge and water on top of one another. The investigation of the distant past is especially important, since the communication of MAL Co. Ltd. indicates that the state obliged the company in 1997 to construct a watertight wall around the reservoir. This wall reaches 10 to 18 meters in depth below the ground, reaching the first impermeable layer, and creates an obstacle to the natural flow of (ground) waters, thus changing the stability of the soil. The movement of the dam, which varies in time, could have led to water soaking into the separating layers of the basin below the ground, making the subsoil watery and loose. The analysis of ERS data can answer whether the stability and the history of movement of the dam has in fact changed since the events of 1997.

1.4.2. Outdated technology at MAL Co. Ltd.

Outdated technology at MAL C. Ltd. The burst of a dam is not necessarily catastrophic in its impact. However, in the Kolontár-Devecser region, the significance of the impact was significant in a global comparison. Clearly, it was the quantity of the escaping material that lead to a floodlike spill. the height of the flood was defined by the quantity of the water. It was also related to the destructive impact, given the fact, that the forces at work are proportionate to the mass of the spill. The dimensions of the flood were much greater than previously expected in the disaster management plans endorsed by the authorities. The first estimations referred to spilt material to the extent of 600.000 to 700.000 m^3, whereas the data published since estimate

900.000 to 1M m^3 of spilled material. To the contrary, the disaster management plan only calculated with 300-400.000 m^3, (consisting of 200.000 to 3 of water and 50.000-100.000 of red mud. Working with a minor margin of error, this only equals half or less of the material that in fact escaped. This entails that if the scenario sketched in the disaster management plan had been realised, the height of the flooding liquid would have only been half of what was in fact observed.)

Instead of a flood reaching 2 metres in height some places, the experts only calculated with a height of one metre, which would have been less dangerous to people. It is also likely that the extent of the damage wrought would not have been reduced in a linear fashion. But to a much higher extent, because the water would not have been able to enter so many houses, and would have flooded a smaller area etc. The larger quantity of water meant that the spilt liquid and the flood it generated was more diluted and flowed much more easily, which also contributed to the destructive impact and the size of the forces involved.

It is an equally important question why there was more liquid material in the reservoir. The construction of slurry walls, built to prevent the contamination of ground waters created in practical terms a closed pool around the reservoir. Given the fact that the water seeping away from the reservoir basins as well as the precipitation falling between the banks and the slurry walls would in the end return to the active basin, due to its alkalinity, entailing, that if the active plant does not exclude this quantity of water, the whole basin will include more and more liquid water or solution in the active basin. This extra quantity of water should have been extracted by the company from the system, and neutralised and channelled into either a natural river bed or the technological system itself. This measure would have reduced the extent of the destruction by an order of magnitude at least as far as the loss of human lives is concerned.

Two further facts support the special role of the liquid phase. First of all, at the time of the second dam break, experts indicated that instead of an escaping flood, what should be expected will be sludge slowly flowing out, which will not be able to reach the villages. On the other hand, the government intends, an is fully justified to do so, to force the alumina plant to switch to a dry disposal technology, which is an admission of sorts that the disposal technology used increased the risk and the severity of the accident.

It seems that MAL Co. Ltd. did not seriously consider a potential dam break at all, nor its consequences, since the disaster management plan, as far as we know, deals with this most important of issues in a rather vague manner. The potential effects, as enumerated, are on the one hand imprecise, lacking the important depth. Firstly, experts should have calculated with a potential dam break in any direction. Secondly, they estimated that the sludge would only be able to reach the village as far as the railway embankment. But even in this case there does not seem to be a reason for not relocating the residents living between the stream and the reservoir. And a further point, which contributes to this is as follows. The fact that local residents received no information and no preparation on what should be done regarding red mud in case of a potential disaster also makes it likely that the disaster management plan was in fact unsubstantiated.

If we consider the damage wrought and the other factors which require further investigation then it becomes clear that the reason of such a severe disaster was not the dam break itself, but the excessive water content of the liquid escaping with the red mud flood. Its sheer

volume was about the double or triple of what had been estimated in the disaster management plan. To this contributed a very strong alkalinity, with a pH value of 12.87. A significantly smaller quantity of water would have meant an impact lower y at least an order of magnitude concerning human lives, the damage, and spoiled human livelihoods.

1.5. Civilian concerns and recommendations

NGOs were the first to call the attention of the authorities and the public to the technological and environmental problems of red mud disposal – up to the Kolontár accident, not very successfully.

The Hungarian Aluminium Oxide and Synthetic Corundum Corporation (MOTIM) was permitted by the North Transdanubian environmental authority to postpone the recultivation of the red mud basins multiple times, a fact that resulted in finishing it only in 2005, as opposed to the original deadlines of 1996 and 1997. In 2001 however—one year before the termination of aluminium oxide manufacturing—, MOTIM inaugurated the highly secure reservoir basin V., that meets even the most modern requirements. Therefore the company chose to invest in increasing the retention capacity instead of recultivating the old reservoirs it had purchased along with the factory facilities and did so right before terminating aluminium oxide—and, by extension, its own red mud—production.

Three years later, it was with reference to its free capacities that MOTIM applied for the right to deposit the acidic gas purification mass previously stored in the Budafok cave dwellings, a project for which the state allotted 1.8 billion Forints. Thus, instead of mitigating the environmental risks, the Mosonmagyaróvár aluminium industry company exposed the inhabitants of the area to an even newer threat when—besides the manufacturing of synthetic corundum and fused cast refractories—it switched over to hazardous waste storing and it did so with the approval of the North Transdanubian Environmental Inspectorate. The environmental protection authority gave MOTIM the aforementioned permit for mitigating the gas purification mass under strange circumstances. In 2004 the North Transdanubian Environmental Inspectorate issued the roughly three page permit in a matter of only a few days, whereas the issuance of an average permit typically takes one month long, its contents amounting to twenty-fifty pages. In the justification part it only features that the acidic and alkaline wastes neutralize each other. The **Mosonmagyaróvár Environmental Protection Association** contested the resolution however, as a result of which—preventing the outbreak of a scandal—MOTIM withdrew its request.

On the premises of the previously founded bauxite processing plant MOTIM has used its red mud basins for storing hazardous wastes ever since, although the governance of Mosonmagyaróvár has not been able to get a permit to implement a communal waste landfill in the same location (because the area lays above an endangered aquifer). Lázár Pavics, the expert from **Clean Air Action Group** filed a report with the prosecutor's office in this regard in 2006, according to the position of the Győr-Moson-Sopron County Attorney General's Office, however the case did not necessitate prosecution. In its answer the prosecutor's office touched on the fact that following the audit of the Transdanubian Environmental Protection, Nature Conservancy

and Water Inspectorate files, it concluded that all of the proceedings and adjudications having to do with the operation of either MOTIM or its predecessors, were founded and conform with the judicial rulings valid at those times. Concomitantly, none of the adjudications listed in the answer letter of the prosecutor's office deals with the placement of MOTIM's hazardous waste storing basins, neither do they discuss in what extent those meet legislations warranting the safety of aquifers. According to the Clean Air Action Group's position, the prosecutor's office was misinformed by the environmental protection authority, presumably following governmental expectations (in 49 percent the ownership of MOTIM belongs to the Altus Corporation, the company of the prime minister of the time, Ferenc Gyurcsány).

Otherwise the Clean Air Action Group notified the government as early as 2003, that the environmental remediation of the reservoirs containing about 30 million tonnes of red mud was a pressing matter. The organization recommended making a modification to the Criminal Code according to which the legal person who yields unlawful advantage to the operation of another, commits crime regardless whether the fact of bribery or other unlawful influencing could be proven. This would be a major step forward in order to put a stop to the present practice where decision makers—state agencies, civil servants, representative boards—make unlawful decisions with no personal consequences. It is that much more urgent, because the anti common interest adjudications that serve the self interest of a few, often have the argument of the decision, withdrawal only being possible accompanied by compensation, which there is no available budgetary source for.

In regard to the environmental hazards of the Almásfüzitő waste disposal site the **Esztergom Association of Environmental Culture** and **Válaszúton Foundation** strove to step up to the authorities (see the summary of their concerns in chapter 1.3.2.). Following the Kolontár accident, the organizations involved asked the environmental protection and disaster relief authorities to perform a special inspection at the Almásfüzitő tailings reservoir as well as to inform the public of the potential environmental hazards. They also proposed that tailings reservoirs and their remediation be controlled by a civilian supervisory committee formed of local citizens and experts.

1.6. Expert proposals

Professional-expert comments on the accident mainly have to do with licensing of the dam construction, the sturdiness of the dam and its structural engineering problems. Former employees of the Hungarian Geological Service now being dismantled, proposed for example that at the time when the now-damaged dam was built, there still existed a geological authority in Hungary (the Central Office of Geology). Back then, a dam of this size could only be constructed with the possession of the authority's licence, therefore the Ajka reservoir would surely have a geological authority licence as well. The authority's licence does contain a size reference (height, capacity, etc.). In 1993 the geological authority ceased existing and in accordance with the mining law, the Hungarian Geological Service became its official successor, holding an administrative licence. In 2006 it ceased existing, too, its official successor being the Hungarian Office of Mining and

Geology. Thus, at present, the original file is to be found in the archives of this last office. This file would be important, because based on this it would be clear who violated the licensing order, when and in what way that person did it. It can be speculated that the environmental protection authority was not aware of the fact, that for certain cases of dam remodelling (e.g. for elevating the dams of the reservoir already in use) it would be necessary to have a geological administrative licence.

According to Member of the Hungarian Academy of Sciences, József Ádám, chair of the Faculty of Geodesy and Surveying at the Department of Civil Engineering, Budapest University of Technology and Economics (BME), looking for the technical causes of the Kolontár dam rupture belongs primarily to the sciences of the field of civil engineering, secondarily to the topic of geological sciences. The professor's main propositions are the following:

a) The safe operation of such large scale engineering establishments entails the continuous monitoring of the condition of the establishment. Naturally, this encompasses the continuous examination of the sturdiness and motion testing of the reservoir dams.

b) Geodesic motion testing is indispensable for preventing similar accidents:

- For the safe operation of the reservoir (reservoirs) a continuous /repeated/ motion testing is needed.

- The frequency of motion testing and the accuracy of measurements (the necessity and method of operational or strengthening interventions can be decided upon depending on this, as a result of potential changes in measurements) are to be designed on the basis of geotechnical experts opinions.

c) As examples to the safe operation of large mechanical establishments, the repeated motion testing of the Paks Nuclear Power Plant, the Danube river bank at Budapest or the valley dams of water reservoirs in the Mátra Mountains could be mentioned.

d) Today's modern geodesic motion testing methods of measurement (employing conventional geodesic measuring procedures and the modern satellite techniques, with GPS-method and satellite radar interferometry) assure detection of changes both in a horizontal and vertical sense, if necessary, even in the millimetric range of accuracy.

e) For conducting such studies, in Hungary there is an adequate scientific capacity available. At the Budapest University of Technology and Economics most similar expert tasks are performed by the faculties of the Department of Civil Engineering. The staff of the Department can give expert answers to questions that concern the planning, calculus, error detection and motion testing related to the disaster of the dam rupturing.

1.7. The role of the authorities

1.7.1. Dismantling the authorities

In 2003 the Clean Air Action Group communicated its position to the government, drawing attention to the fact that dismantling of authorities as planned at the time would cause a lot more damage to the state then the benefits it may bring. The Group did not manage to prevent the process, what is more, it continued. The inspection services were especially severely hit as an outcome of the austerity measures of the years 2006-2007. Twenty-six environmental protection organizations protested this step in a joint statement, that—among other things—contained the followings: "Right now, at the environmental protection and nature conservancy inspectorates there is an average of less than half an hour allotted to a case. Site visits usually cannot be fit in this amount of time, office workers mostly make their decisions based on the paperwork turned in. One can imagine how objective the documents may be that are handed in by those, who have vested interest in the quickest possible realisation of the project or the avoidance of the environmental protection fines." The Kolontár red mud disaster also proves just how right they were.

In 2006 the Clean Air Action Group made a study and provided prime minister Ferenc Gyurcsány with it, describing the situation of the authorities, wherein it concluded the followings: "The government tries to justify the dismantling with budgetary thriftiness. At the same time it hasn't even estimated the severity of the damage inflicted upon society by the dismantling or the magnitude of cost assumed by the state, for example due to the increase in disease cases caused by the complete destruction of natural and cultural assets, the commonwealth and by environmental pollution. Namely the measures were not preceded by any kind of impact assessment, professional or public debate. (...) Weakness of organs responsible for safety, the enforcement of laws, is a characteristic of less developed countries. On the other hand, in the most competitive countries of the world regulations serving safety (environmental and health protection, etc.) are the most stringent and the conditions of inspection are such, that these regulations can be enforced. Hungary should not choose Ethiopia, not even Greece as an example to follow, but rather Scandinavia that is able to sustain a stable economy and society, and that is safe." The turned-in document did not receive a meaningful answer. The fate was similar of the Protect The Future Association's study titled "Smaller State, Greater Problem", based on its 2007 survey and that called for attention to the severe dangers lying in the undue situation of the environmental protection inspectorates. The research done by Protect The Future gave an objective proof to the flaws of inspections and the softening-up licensing practice as a result of the cut-backs at the environmental protection authorities.[4]

An even greater blow than the one of the environmental protection inspectorate was suffered by the National Public Health and Medical Officer Service (ÁNTSZ) that was halved, with the most experienced experts being removed from (their wages were the highest, thus the biggest "savings" could be achieved by firing them). The under-secretary of the time at the Ministry of Health gave the explanation to these steps by saying that "the bureaucratic procedures of the ÁNTSZ impeded the functioning of businesses." If the laws were indeed bureaucratic, then

[4] http://www.vedegylet.hu/index.php?page=news&news_id=651

the these laws should have been changed. However such changes did not happen – obviously for the reason that the laws assign those duties to the ÁNTSZ, that in the favour of citizens' health and safety it needs to fulfil. The government stepped in against "the bureaucracy afflicting businesses", by not reducing the assigned duties, just the money and the staff! By doing so the ÁNTSZ became incapable of taking care of its duties provided by the law. This is what became apparent during the red mud disaster, when the ÁNTSZ "concluded" that the Ajka red mud was non-toxic based on 1987 (!) measurements data. According to this data the sludge has a pH of 11.8, which is one order of magnitude less than the value of 12.9 pH measured in reality (the pH shows acidity/alkalinity based on a logarithmic scale, thus the 12.9 pH means an over ten times stronger lye concentration, than the pH of 11.8). This is how it could happen that the first up-to-date data following the disaster was not let known to the public by a state institution or authority, but chiefly from the measurements of an international environmental organization's, the Greenpeace's office in Hungary.

A modern state cannot do without the state-run inspection organs that function effectively and that are well prepared. As a result of the accelerated scientific-technical and economic development we have to face an increasing amount of risks. The large number of new chemical substances, the nuclear products spreading wide, the increasing transportation capacities, surfacing of the genetically modified products, the operation of the many hazardous industrial facilities constitute such risks, that require severe regulations and authorities performing their activity on a professionally high level of competence. In Hungary, in recent times the inspection organs—the environmental protection and nature conservancy authorities, the ÁNTSZ, the hydrological organs, the plant protection service, the traffic monitoring authorities, the Consumer Protection Main Inspectorate and others—have been dismantled in an ill-considered way, continuously and at a large scale.

Financial austerities at the state inspection organs cause much larger damages, than the benefits they bring forth, amounting to: crime increases, societal injustices and tensions grow stronger, the health status of the citizens and the quality of the environment worsen, the country's assessment changes unfavourably, moreover, the state revenue decreases. Dismantling of the inspection organs only favours those, who are striving to bypass legislature. Such complaints are continuously registered coming not only from the citizens, but those multinational and smaller domestic companies that take regulations seriously, as well.

Undeservingly little attention was given to the fact that authority dismantlings lead to prolonged case processing, a decrease in service quality and to juridical uncertainty. Procedures are slow, non-transparent, deflecting responsibilities right and left, symptoms which mostly stem from the overloadedness of the clerks, unpredictability, the constant reorganizing, "rationalizing".

The European Union stated even before our accession, that at the environmental protection and nature conservancy local organs there would be a need for more than one thousand additional employees in order for us to comply with the community's requirements, whereas GDP-proportional financing of the domestic environmental protection sector brings up the rear in the OECD, being approximately at the level of Turkey – as it was also shown by a Protect The Future-study.[5] On the contrary, since then, staff of these organs has been decrea-

[5] http://www.poltudszemle.hu/szamok/2008_3szam/2008_3_javor.pdf

sed continuously and the process only stopped in the last one or two years. Presently, at the environmental protection inspectorates a case is often allotted only a few minutes to be taken care of. Apart from few exceptions, the individual cases are approved without considerate review. Year after year, citizens' complaints arriving to the civil organizations are more and more numerous. Illegal waste disposal, the different activities that pollute the air and emit substantial noise, green area destructions are often due to the lack of authority inspections and measurements, as well as the fact that on-site inspections have become extremely rare and the quality of those is not always adequate because of the overloadedness of the employees. Delay of cases also happens frequently, which may discourage honest investors. Even certain leaders of the previous environmental protection ministry stressed it occasionally as an important consideration, that authorities "shall not be in the way of them, but rather help business activities as smoothly as possible", referring to the fact that they do not need to fully comply with environmental laws.

The situation is especially worrisome in the activity of the building authorities. According to the Green Economic Stimulus, the study put together by the **Lélegzet Foundation** in 2010, "right now—as a caricature of the statev—21 people are inspecting constructions in Hungary, out of which ten percent are inspected (the European average is sixty percent). Giving building permits out is the competence of the clerk and the departments of building authorities. The latter ones however cannot be regarded independent of the local governance, the mayor. This practice takes an expensive apparatus and at the same time—especially in the jurisdiction of the smaller governances—the adequate expertise is not assured. It is very common, that they administer building processes where regulations are infringed upon and they fail to represent the interest of the public versus the infringing builders. From societal and national economy standpoint the danger runs at least this high, that the infringing constructions too often are not stalled and they are not inspected adequately. Edifices built unlawfully, are practically never brought down." The reason behind failing to deconstruct is often simply financial – governances do not have the money to prepay for the official deconstructions, the costs of which are only redeemable later – as it was stated by the 2nd report of Protect The Future's Representation of Future Generations program in 2001.[6]

Local governances get numerous tasks as environmental protection authority of first instance (permitting related to woody plants, air protection authority, building authority, etc.), that legislation deploys to the clerk, who typically delegates related duties to the environmental protection department or the executive. It is especially true about these organs that in many places the needed expertise is not available and on top of all, due to the local connections and system of influences, the chance for biasedness, in more severe cases corruption, is quite significant. In many instances governances themselves are interested (e.g. via the local taxes) in carrying out certain environmentally burdensome projects, that also elevates the risks of corruption.

[6] http://www.vedegylet.hu/doc/jonek_2.pdf

The study of the Breath Foundation spelled out some recommendations as for how to strengthen the activity of authorities, too:

- The practice of environmental protection licensing has to be made more strict. In cases of projects that take up huge masses of land, attract heavy loads of traffic, not to be possible for the environmental protection authority to come to such absurd conclusions as the one saying that the project "does not have significant environmental impacts".

- In the cases of projects, the practice of impact zone delineation should be changed, broadened. So that thereafter it could not happen for example, that the impacts of a linear construction project generating significant traffic across a huge area are only assessed right alongside the new trace.

- The correctness of the key elements, measurements of the case study and impact assessment documentations handed in by the investor, should be assessed by the authority with the revision of the inspectorate in every instance.

- Both the available financial and human resources have to be expanded at the environmental protection, nature conservancy and hydrological inspectorates, the hydrological boards and the nature conservancy watch. Furthermore, a transparent organizational framework should be created that assures the most effective use of resources possible. For operating the environmental protection authorities, the best practical experiences should be implemented from the extremely rich international specialized literature. First, for instance, the recommendations made by Impel (European Network for the Implementation and Enforcement of Environmental Law) should be naturalized in the domestic practice.

- It needs to be specified in law, that the environmental protection, nature conservancy and hydrological authorities cannot hire an independent expert in a specialty issue that belongs to their area of competence. Expert opinions requested from partner authorities, the specialized authority's position and the own experts have to provide sufficient professional background for the decision making.

- The process in which authorities regard civil organizations expressing an opinion about their procedures as obstacles, instead of seeing the participants in improving effectiveness, the quality level of professional decisions and the social acceptance of those, needs to be reversed.

- Public hearings related to environmental protection licensing procedures always need to be held after work hours, at the closest possible location to the planned project, in order to allow as many people as possible to participate (at the moment in many cases efforts are reversed).

1.7.2. Lax authorities, lack of inspections

Based on the waste management law in effect, it is the MAL Co. Ltd. that had to have its waste management (including the storing technology) revised, which took place in 2003. **The company contested the environmental protection operation licence received during the licensing procedure, because the environmental protection authority of first instance ordered treating of the red mud as hazardous waste**.

The environmental protection inspectorate of territorial jurisdiction, on July 22nd 2003 transferred the documentations to the Main Inspectorate in order for the Main Inspectorate to confirm the fact of hazardousness or the opposite—according to the rules of the time. The answer sent to the Inspectorate by the Main Inspectorate (OKVF) on January 16th 2004, said that the pertaining legislation—Government decree; 98/2001. (VI.15.) about the conditions of activities related to hazardous wastes—was modified in its § 4. According to this, the producer of the waste is responsible for classifying its waste. That being said, the OKVF redirected the case to the inspectorate. (Üi. [Case identification number] 30 010-61/2004 p.10). By this time, based on the information about the technology and the test results, the Inspectorate did not oppose the classification of the waste as non-hazardous any more, thus the environmental protection operation licence was born.

The licensing procedure had some arguable points, however. The Main Inspectorate had not made a decision in this case for over 5 months. (Based on the Administrative proceedings law (Áe.1957/IV.tv.) in effect in 2003, the deadline would be 30 days in the second instance, too, but neither does the § 43 (1) of the Waste management law (Hgt.2000/43.tv) allow for longer deadline than 90 days). It was during this period that the extremely important change in the government decree took place, aforementioned above. The 98/2001. (VI.15.) Government decree stipulates the conditions of activities involving hazardous waste as follows: "Classification of wastes not featured in the waste catalogue, those ones not possible to be featured there or wastes the consistence of which is unknown, therefore hazardous wastes needs to be requested through the Main Inspectorate." This changed as of December 4th 2003: according to the 16/2001. (VII.18.) Ministry of the Environment (KöM) decree, the company classifies itself. It was then, that based on the decree the red mud was moved to code 01 03 09 EWC from 01 03 07 (07 is the group of hazardous wastes associated with metal ore mining and with treatment of such mining materials). **Based on the documentation sent in by MAL Co. Ltd., the Inspectorate accepted the reclassification, this way the red mud of MAL Co. Ltd. became non-hazardous waste.**

The change happened following the recognition of the fact that the environmental protection authority ever shrinking in its staff and financial instruments, did not have sufficient capacity for the inspection activity. Thus the inspection of the red mud reservoir basins was not of proper scale either, since the authority (would have) had to perform random re-inspection of countless other, air pollution, air burdening, water quality data provision.

Based on the environmental protection licence, MAL Co. Ltd. also had to provide the Inspectorate with the data and documents listed below:

a) annual summary report of the operation of the waste disposal site by April 30th following the current year, including the status description of the waste disposal site, data about sinking of the waste disposal site level, the results of underground water testing.

b) water quality studies as part of the monitoring system, on quarter, half year basis at the specified wells, as well as water level observations, also by April 30th.

The licence prescribed MAL further reporting, revision, operational, managerial obligations from the monitoring wells to sound protection, data that is also the responsibility of the authority to inspect. The company had the obligation to report to the environmental protection inspectorate all changes listed in the licence, the day following the observation. (Meeting this obligation, was also the authority's duty to inspect.)

On February 17th 2006, the aluminium oxide sector of MAL received an integrated environmental permit (MAL-EKE) from the inspectorate (valid through February 28th 2011). This licence included (Üsz. 10897/05) the dilution method using reclaimed water and lifting the water into basin X. Points 9.xx and 11.xx deal with the issues of waste management, and also cover the report of change obligation. The issue of the reservoir the licence does not touch upon any more, delegating that into the competence of local building affairs.

Ensuing the Kolontár accident, the **Society of Conservationists of Eastern Hungary** initiated a criminal complaint at the Supreme Court against an unknown perpetrator or perpetrators in suspicion of reckless endangerment due to professional negligence resulting in manslaughter. According to the legal position of the civilian organization, the environmental protection authority concerned, according to the ruling of the § 22 (3) of Government decree 314/2005. (XII.25.) about the environmental impact assessment and the integrated environmental usage licensing, during its on-site inspection performed on September 23rd 2010, did not do justice to the 219/2004. (VII.21.) Government decree about the protection of underground water tables and to the pertaining instructions of the 2001/331/EK (2001. IV.4.) proposal about determining the minimum requirements of environmental protection inspections conducted in the member states (in other words it did not perform a veritable inspection, resorting to the data provision of the operator).

Following the accident, Politics Can Be Different (LMP) immediately brought up the issue of authorities' responsibility as well. According to the position of the ecological party, both the flaws in the Hungarian and the Union regulations played role in what made the disaster possible. In the European Union the bauxite residues (red mud)—the solid phase—is not considered hazardous waste, in Hungary however, based on their alkalinity resulting from the employed technology, they are clearly to be listed among hazardous wastes. (It is worth mentioning here, that the solution phase accompanying the bauxite residues that leave the aluminium oxide factory have a pH exceeding 11.5, not only in Hungary, but in other parts within the EU as well.) In practice, however, authorities adapt the softer regulatory threshold in our country, too, treating red mud as non-hazardous waste.

LMP also pointed out that alongside the potential technical causes, the accident clearly raises the inadequacy of the administrative inspection, too: the environmental protection inspectorate does not have the competence of performing structural engineering examinations and not even weeks after the dam rupturing was it obvious which authority would have the duty to examine the technical status of the similar dams. "Based on the final decision of the Capital High Court in December 2010, the waste can be rendered harmless by depositing the red mud and the creation of the waste disposal site requires integrated environmental permit." The ruling closed up the competency dispute of the Central Transdanubian Environmental Protection, Nature Conservancy and Water Inspectorate versus the clerk of Devecser. The court did not challenge the fact that the regulation is ambiguous, but stated: based on the ruling currently in effect, the red mud reservoirs undoubtedly belong under the effect of the waste management law. Such a structure can be built "only by complying with the rulings of the specialized legislation and with the licence of the environmental protection authority". One of the conditions is to undergo the procedure necessary to be given the integrated environmental permit, that clearly belongs to the competence of the environmental protection inspectorate, according to the high court. From the order it becomes apparent, that the clerk exercising the power of general building affairs authority, does not have any duty in relation to such establishments whatsoever. Nonetheless, following the disaster, the inspectorate still conjured the clerk to conduct the administrative procedure, who refused to act, however, arguing that he did not have the competence.

In LMP's opinion, the inspection permits of the green authority that has been systematically weakened throughout the past years need to be strengthened, which requires both legal measures and staff expansion. The case warrants a Union level revision of the environmental protection regulation system of the state of Hungary (and presumably of the other states in the region). In the case of high environmental risk industrial operations, a system of mandatory financial collaterals and liability insurances has to be implemented that conform with the EU-guidelines that pertain to environmental responsibility. The system of environmental protection licensing and revision also has to be transformed. Finally, at the level of the European Union there is a need to create a guideline governing the mandatory liability insurances of hazardous industrial plants, as well as the establishing of shared funds filled by the deposits of the hazardous industrial plants and aimed for covering those damages that otherwise (based on the insurances and the damaging companies assets) could not be paid for.

The same opinion was shared by the European Commission in its stand at the beginning of December, according to which the red mud that flooded Devecser and Kolontár should have been classified hazardous waste (that is, Hungarian authorities let the MAL Corporation operate based on erroneous licences).

Following cautioning of the Union, the ecological party demanded a thorough and unbiased investigation to find out what professional errors were committed in the licensing procedure. Earlier, LMP had already drawn the attention to the fact that for the event of the red mud disaster not only the MAL Corporation is to be held responsible, but all of the authorities concerned, furthermore the legislation in effect and the governments that had failed to create the adequate legislation since 1995. In the instance of the authorities, it is incomprehensible, how they could give out licence in 2006 for regular waste disposal in the case of a material

having a pH of 13. The Basel Convention is clearly classifying bauxite residues (the red mud) hazardous waste, as long as their pH is higher than 11.5. This criteria features exclusively in relation to the red mud—not surprisingly, based on this, the European Commission also came to the conclusion that **the red mud causing the disaster is considered hazardous by the European Waste Catalogue (EWC), therefore the Hungarian authorities committed an error when they did not classify it as hazardous waste.**

LMP believes that it is the responsibility of governments of the past fifteen years, that as a result of the continuous changes dotted with cut-backs and dismantlings inflicted upon the administrative system, such an administrative system has been created that is insecure even in its own competencies, that is weak, susceptible to political influencing and that practically does not have on-site presence. In relation to this case, the ecological party called upon the government once again, to strengthen the administrative system, to bring to a halt the political influence and to lead a thorough and unbiased investigation of the red mud disaster, naming those found responsible.

Summary

It is not possible to account for the Kolontár red mud disaster by means of a single cause. Among the potential causes and preceding events, the following should by all means be noted:

- **The conditions of privatisation:** it was with reference to the obligations of environmental protection that the buyer was able to acquire the Ajka Aluminium plant at a very low price. However, these obligations were not properly regulated within the contract, and there were also gaps in monitoring implementation. Moreover, the authorities allowed on more than one occasion for the owner to postpone meeting these obligations.

- **Deficiencies in monitoring environmental damage control:** the privatisation contracts contained an obligation to provide for environmental damage-limitation, but the monitoring of how this was implemented was deficient. No detailed documentation is available, except for written records to the effect that invoices were presented as evidence for compliance without technical inspection having taken place;

- **Outdated disposal technology:** when the first red mud reservoirs were established, the technology of wet disposal for red mud was still widespread, but much safer dry processes were already available by the time the permit for Basin X was granted, and the integrated environmental permit for the reservoir was granted;

- **Inappropriate classification of red mud waste:** when the integrated environmental permit was granted, red mud was not classified as hazardous waste, even though it clearly counted as such on the basis of its pH value under the Hungarian and EU legislation then in force;

- **Licensing and monitoring malpractice on the part of administrations:** following the disaster, a court ruling was required to clarify which authority should have granted a permit for the dam building at the reservoir and carried out structural engineering inspection of the built structure;

- **The sinking of the dam (which could also be related to posterior slurry walling):** satellite images clearly show that the barrier sank in certain places at a rate of 1 cm / year, creating maximum shear stress precisely at the section where the dam finally broke, while the sinking itself might have occurred because of the slurry walling, or because of the dam base and subsoil becoming soaked due to the slurry walling. However, no use was made of the satellite imagery in the structural engineering inspection of the dam, even though they were continuously available; neither was the stability of the structure monitored in any other way.

- **Negligence on the part of the authorities and government officials:** several NGOs had previously protested about the lack of environmental protection developments and the failure to carry out inspections. Their comments had no practical consequences at all.

Recommendations

- Privatization documents of the industrial plants with great environmental risks, the environmental protection compliances and the inspection thereof all have to be revised. In the event that a clear connection is shown between the improper privatization practice and the large increase of the environmental risks, then the personal responsibility also has to be investigated among the participants of the privatization process.

- The licensing practice of the environmental protection authorities has to be revised, with special attention to industrial processes resulting in large amounts of hazardous waste, to the disposal of hazardous wastes, to the integrated environmental permits relating to these and within the IPPC guidelines to the enforcement of the BAT instructions.

- In the case of authorities taking part in (and those avoiding taking part in) the inspection and licensing, the exact institutional and personal responsibilities need to be investigated.

- It needs to be assessed whether the administrative capacity presently at hand is proportionate to the truly existing industrial hazards and the inspection demands relating to them, as well as the institution system needs to be reinforced where justified.

- There is need for regulation to be passed specifying the frequency of structural engineering and environmental safety inspections of similar structures and the distribution system of responsibilities (see the pertaining LMP bill).

- In order to prevent similar disasters, client rights of the civil organizations have to be strengthened, not taken away.

Smaller buildings were crushed by force of the current

2. An account of the accident

2.1. Chronology of the accident

4 October 2010

- At 12 25 pm, the barrier of the caustic waste reservoir breaks in the vicinity of Ajka, a town located in Veszprém county, at a distance of about 160 km from Budapest. The red mud reaches the municipalities of Devecser, Kolontár, Somlóvásárhely, Somlójenő, Tüskevár, Apácatorna and Kisberzseny. Devecser and Kolontár experience the greatest devastation. (In the following days, the red mud contaminates the Torna creek and the valley of river Marcal, almost reaching the river Rába. The red mud contaminates the valleys of the Torna creek and the Marcal river, almost reaching the river Rába. Through the Torna, Marcal, Rába and the Moson branch of the Danube, the alkaline slurry enters the Danube, causing some extent of destruction in all the affected waters. Along the Torna and the impacted section of Marcal, practically all aquatic life is destroyed. The disaster leaves 10 people dead and almost 150 slightly or severely injured, including local residents and the participants in the rescue operations. The spilt mud

and alkaline slurry pollutes about 1.000 acres of land. The amount of the emitted is was about 0.9–1 million cubic meters.)

- Fire-fighters reach the scene in about 8 minutes and start rescuing the inhabitants trapped or injured, amounting to about 60 victims in Kolontár and nearly 720 people in Devecser.

- Minister of the Interior Sándor Pintér and György Bakondi, the director of the National Directorate General for Disaster Management immediately travel to the scene.

- The commanding unit of the Directorate for Disaster Management is set up by 2 pm. The Local Defence Committee starts to operate.

- Action is taken immediately to accommodate the inhabitants whose homes have been flooded. Accommodation is organised for 40 people in Kolontár, while temporary night shelters are put up for 500 people in Devecser. Only 31 of the night shelters are used since the vast majority of afflicted chose to lodge with relatives and friends in neighbouring villages.

- The Directorate for Disaster Management (OKF) sends four members of the Crisis Intervention Team to the scene to provide mental health care and manage the rescue operations.

- At 4 pm on 4 October 2010, the regional offices of the Central Agricultural Office declare a ban on fishing and hunting. Sales and use of contaminated fodder and food is prohibited through an official intervention by the Chief Veterinary Officer.

5 October 2010

- In order to protect the water quality of the Marcal River and to prevent pollution of the Danube, the calcium nitrate and magnesium nitrate delivered on the scene is deployed in the river by fire fighters and military forces under the supervision of water management professionals from early dawn.

- 340 people are mobilised and deployed on the scene by the Police. Acting on oral instruction, the Army arrives on the scene as well.

- Shipping the collected pollutants starts back to the premises of the company having caused the incident, into an intact basin.

- Secretary of State for the Environment Zoltán Illés suspends production at MAL Co. Ltd. with immediate notice, simultaneously ordering the company to start restoring the reservoir damaged in the area of Ajka. The Ministry of the Interior calls upon the company to allocate HUF 100.000 as emergency aid to the each owner whose homes have been damaged.

- The Prime Minister requests the Minister of the Interior to investigate the issue of personal and material liability. The Government calls on the Minister for Rural Development to assess the damage to producers to and its consequences. The Ministry for Rural Development initiates a revision of other similar red mud reservoirs until 15 October.

- The Army and the National Public Health and Medical Officer Service (ÁNTSZ) assess radiological threats. Both laboratories conclude that there is no hazardous radiation exposure in the area.

- With the cooperation of the Central Agricultural Office, the collection and disposal of animal carcasses starts.

- The Veszprém County Defence Commission decides to ban the consumption of contaminated food products and animal feeds, as well as on involving public workers and municipal forces in the works in the municipalities.

6 October 2010

- The disaster is discussed as the first item on the agenda of the Government meeting. The comprehensive report of the Minister of the Interior is heard. The government declares a state of emergency.

- The Minister of the Interior announces that the Police will give first priority to investigating the issue of liability. The investigation is to be taken over by the National Bureau of Investigation.

- Professionals address the problem of alkaline red mud escaped from the reservoir at Kolontár flowing into the Marcal river. The Minister of the Interior states that round the clock, 24 hour long guards or monitoring shall be started on the dam of the reservoir.

- The government announces that staying in Hungary is completely safe, the collapse of the dam in no way threatens people and tourists. The disaster of the sludge reservoir is local, without the risk of adverse health effects outside the impacted areas.

- As a consequence of the disaster, the Government Accountability Commissioner speeds up the investigation regarding MAL Co. Ltd., the owner of the alumina plant. For the time being, information is gathered on the contracts concluded between the group and the state in recent years.

- The Army constructs a temporary bridge to replace the bridge destroyed at Kolontár. The maintenance of the replacement bridge will be continually secured.

- At a press conference by the Government Spokesperson, the Minister of the Interior states that the professionals are able to treat the alkalinity of the red mud released from the reservoir in the Marcal River.

- Benedek Jávor, the President of the Sustainable Development Committee of the Parliament, delegated by LMP, investigates conditions at Kolontár and Devecser. At a local press conference he urges the Minister for National Development to disclose the privatization contracts of the Ajka plant.

7 October 2010

- Early in the morning, the Prime Minister conducts inquiries about the situation on the ground. He walks along the streets among the destroyed houses of Kolontár, personally assessing the damage wrought by the red mud flooding the village on Monday afternoon. He ensures the injured that they will not be left alone. The elimination of damage in the surrounding damaged or partially destroyed homes is carried out depending on whether their owners declare they are willing later to remain in their houses or the flooded district.

- At 3 pm, the County Defence Commission meets in Devecser, followed by a residential hearing with the participation of the county director of disaster management.

- Sanitary tents are set up by the government in Devecser and Kolontár in order to ensure that the participants in the rescuing operations in direct contact with the material may immediately be washed, while they are still wearing the protective garments.

- The Kolontár fish pond is drained in the hope of finding the three missing persons, but the bodies are not found.

- The three-part dam designed to stop further leakage from the damaged basin is constructed. A new reservoir is built to store the collected sludge and debris.

- The National Directorate of Disaster Management entrust experts from Károly Róbert College, Gyöngyös to carry out aerial damage assessment of the areas flooded with red mud as a result of the breaking of the dam of the Ajka caustic waste reservoir.

- The National Bureau of Investigation initially stated they the original investigation into the suspected crime of reckless endangerment due to professional negligence resulting in manslaughter was reclassified as endangerment due to professional activities resulting in a lethal mass disaster.

- The Army constructs a temporary bridge to replace the bridge destroyed at Kolontár. The maintenance of the replacement bridge will be continually secured.

- More gypsum is deployed in order to uphold protection and to mitigate alkalinity at Kolontár village, followed by Devecser and Somlóvásárhely, the Marcal, and the bridge of the public road connecting the settlement of Szergény and Vinár.

- Fidesz MEP János Áder proposes the establishment of an EU disaster fund at the plenary session of the European Parliament in Brussels.

8 October 2010

- Gypsum is spread from the air at Marcal. This water is further diluted with water from the Rába and the Moson branch of the Danube, only entering the Danube at this stage. Further water quality problems and adverse health effects are not expected.

- After cleaning the residential areas, mitigation starts in the peripheral areas of the towns flooded by red mud.

- At 6 am on 8 October, a pH value of 8.8 is registered at the Petőfi Bridge section of the River Rába, and a pH value of 8.34 is registered at the Széchenyi Bridge section of the Moson branch of the Danube. Measured pH levels reach 8.5 at the point where the Marcal meets the Rába, and approx. pH 8 on the Danube. Along the Marcal, pH below 9.0 is reported at several measuring points. No further fish death is observed on the impacted river sections. The water management agency continually measures water pH values at the Budapest Danube section, but so far there is no indication of increase. Thus it is not likely that the contamination would reach the capital.

- Eighty police officers constantly maintain safety in the disaster-stricken area and emergency ambulance teams continue the search for missing people.

- A mentésben 400 ember és több száz munkagép vesz részt.

9 October 2010

- The evacuation of residents from Kolontár, in a state of emergency, is ordered impacting a total of 715 people, as The dam of Basin 10 of the Ajka reservoir weakened further during the night.

12 October 2010

- The construction of the third protective barrier is constructed at Kolontár to keep the resident safe. In Devecser, the location of new residential block is identified, to be constructed for those who used to live in the areas flooded with red mud flooded.

13 October 2010

- The number of deaths in the disaster reaches nine, as on of the injured dies in the Ajka hospital. The evacuation order is lifted after the construction of the new barrier in Kolontár safeguards the security of the residents of Devecser.

15 October 2010

- The first of the residents evacuated can move back to Kolontár.

2.2. Further risks

2.2.1. Another dam break

In the analysis of further risks, the question of the causes of the dam break need to be answered. Equally, an answer needs to be given to the question of why it has led to so severe consequences, and whether it might be repeated in the future. As shown in the previous chapter, it was the dimensions of the material spilled that resulted in a real flood in the case of the Kolontár disaster. Similar dam breaks have never happened in the field of alumina production. This at least partially explains that the expected impact was underestimated in the disaster management plan. Furthermore, the fact that the risk of a potential further dam break could not be estimated with significant precision in the days following the disaster can also be accounted for by the unprecedented nature of the accident. For this reason, the construction of a system of barriers was begun between Basin 10 and the flooded communities, the function of which has still not been entirely clarified. According to explanations given afterwards, what the experts were concerned about was not the fear that further quantities of sludge would leave Basin 10. The probability of such a turn of events was not significant for there was only the solid phase that is, a mass of limited mobility left within the reservoir. Instead, they were concerned that the wall shared by Basin 10 and Basin 9 would break. As the letter was equally filled to the brim with liquid, the fact that the spilled sludge was not there anymore meant that the wall of was left without support from the direction of Basin 10. At the same time, the barrier construction works continued even after a significant reduction of water levels in Basin 9, thus reducing the risk of the dam breaking.

2.2.2. Resuming production without a change of technology

The examination of the causes of deaths, health injuries and other consequences made it clear that the dimension of the disaster was not due to the dam break but rather to too much water being present in the escaping red mud flood. A significantly lesser quantity of water would have resulted in much more limited damage as far as both human lives and damages are concerned. Arguably, the effects and impact would have been smaller by several orders of magnitude and

it is likely that no loss of life would have occurred if the flood wave had been only half as high. At first sight it is not easy to understand how the authorities could have permitted production to be resumed with the same wet disposal technology especially with regard to the fact that according to the first declarations, the plant had only a limited capacity for disposal, barely enough for a few weeks or one or two months at most. With hindsight, the primary reason for that seems to be related to the intention to avoid the plant getting into an untenable situation and losing its markets. Thus environmental and environmental security considerations have played a limited part in the decision making process. At the same time it is a fact that simultaneously with resuming production, the company started to take preliminary steps to a shift to the dry depositing technology.

2.3. The health and environmental impacts of the disaster

2.3.1. The chemical background of the disaster

Alumina (technically: pure aluminium oxide), is almost exclusively produced from bauxite worldwide. Bauxite mined in Hungary (excluding the moisture absorbed) contains approx. 50% of aluminium oxide (Al_2O_3) mostly in the form boehmite, and approx 20% of iron oxide (Fe_2O_3). Further basic constituents include SiO_2 and oxides of other metals, such as titanium ores. The colour red is due to the iron (III) oxide content. In order to produce alumina from bauxite, the first step should be to separate hydrated aluminium oxide (boehmite) from the other components. This process of extraction is secured by relatively concentrated NaOH (caustic soda). Boehmite (AlO(OH)) is chemically soluble in the alkali while iron (III) oxide is not. As a first approximation, the other components of bauxite do not interact with alkali (except clay minerals).

The "dissolution" of boehmite in NaOH is not actually a process of physical dissolution, but a chemical reaction: water-soluble sodium aluminate is formed as an effect of the high temperature (240°C) and high OH^- concentration.

After the alkaline extraction, the solution (i.e. the solution of the sodium aluminate compound) is separated by sedimentation form the essentially insoluble bauxite residue (red mud). The solution is cooled, thereby becoming highly saturated in aluminium hydroxide, then the bulk of the aluminium hydroxide is crystallised. The aluminium hydroxide (hydrated alumina) is removed by calcination, thereby producing alumina. And as the extraction is performed with a relatively highly concentrated alkaline solution, the alkaline content of the solution phase accompanying the red mud upon separating the residual bauxite is equally high.By means of a multi-step counter-current water ablution process (7 steps at Ajka), the alkaline concentration of the accompanying solution is reduced to approx. 1/40 of the original value (typically, less than 0.5% NaOH level).

The solution phase accompanying the washed red mud has is alkaline, with pH values in the range 12 to 13, thus it is a fairly strong base.

Today, the red mud is not used anywhere in Hungary. As it contains little aluminium oxide (15-19%), its iron content is higher than that of bauxite, therefore, in principle, it could be used in iron production. Even though the manufacturing process is available in theory, it

is nevertheless not used. The reason is that it is still significantly more expensive and energy intensive than producing iron from mined ores. Thus it is dumped as non useful waste in reservoirs, and stored there until "better days" come.

Red mud is not classified as hazardous waste in Hungary, even though it clearly is hazardous due to its alkalinity. The water generated in the course of the sedimentation of red mud in the wet disposal process used at Ajka is mostly put to technological use. The utilization of useful ingredients by the manufacturer or operator is required by law in any case. As the bauxite residue (red mud) is not as yet the raw material of any other process, whatever is done to it appears as no more than "wasted" costs for the aluminium industry. Therefore it remains in the reservoirs. The reservoirs are typically recultivated, that is, covered with a surface organic material, such as sewage sludge, and an attempt is made to grow plants on top.

2.3.2. Environmental and health effects of the disaster

a) Exposure to a highly alkaline solution causes severe, potentially fatal injuries. Strong alkali dissolves the layer of fatty suet protecting the skin, and loosens the epidermis. This way, the internal tissues become unprotected. The dissolution of the oily substance secreted by the sebaceous gland is identical with the process traditionally used for making soap. Boiled in alkali (to speed up the process), the fat (glyceryl ester formed with palmitine, stearine and oleic acid) hydrolyzes and glycerol and soap are produced. The soap produced also "helps" to dissolve the fatty substances left over.

b) Strong alkalinity causes severe damage to tissues. As a result of high pH, proteins are denatured (including enzymes) and various cell membranes are destroyed (cell membrane, mitochondria, chloroplasts, etc.) thus the damaged cell tissues die.

c) Red mud contains traces of toxic metals. Certain metals such as mercury, cadmium and lead are highly toxic because they are deposited in the body connected to proteins and change the structure and functioning of vital proteins before long. The largest part of toxic metals are heavy metals, (with a density higher than 5g/cm^3), not because they are "heavy", but because their atomic structure enables them to make strong bonds with certain protein molecules. There is a debate about whether red mud from Ajka contains toxic metals at dangerous concentrations. According to measurements conducted by the Chemical Research Institute of the Hungarian Academy of Sciences, samples of red mud taken in the region of Kolontár and Devecser have concentration levels lower, sometimes significantly lower than sewage sludge limit values for cadmium, chromium, mercury, nickel, lead and zinc (http://mta.hu/mta_hirei). We have no reason to contest these test results. However, we have to think of what reason the researchers had to compare the composition of red mud to be found in the homes and gardens, and when inhaled, the lungs of the residents, to limit values of sewage sludge. Normally, the average citizen does not encounter sewage sludge. We do not tread in it, not even in rubber boots, we do not sweep it from the corner of our rooms, neither do we use it to water garden vegetables or inhale its dust. Thus the point of reference is mistaken. From the point of view of human health, concentration is not the real issue. What is, however

is whether living organisms (plants, animals, humans) are exposed to these heavy metals, considered toxic. In this regard, test results published by MTA (relating to solutions in water and ammonium acetate of 4,5 ph value) fail to provide sufficient answers.

d) Red mud entering rivers and the soil has a highly alkaline ph level that needs to be neutralised or at least mitigated. Acidic substances are suitable for this goal. In practice, acidic acid and sulphuric acid was used. For neutralization or mitigation purposes, gypsum ($CaSO_4$) was also used, spread in the contaminated area. Gypsum was poured in the Torna creek and the Marcal river in the emergency circumstances. Caustic soda and acidic acid react to form sodium acetate. This substance hydrolyzes in an alkaline manner, but it is much less alkaline than the original sodium hydroxide was. Gypsum is suitable for neutralising because $CaSO_4$ though, it is a salt dissolving badly in water, still enters Ca^{2+} ions in the system. In the presence of such a high OH^- ion concentration, based on the - the products of solubility - the $Ca(OH)^2$ dissolves even worse than the gypsum does. Thus, part of OH^- ions , responsible for alkalinity react with Ca^{2+}-ions to form a precipitation, and this decreases the alkalinity.

e) What happens to the spilled red mud once it dries up? The dry dustlike substance can be carried by the wind, and be inhaled by organisms. When inhaled, the red mud causes the same damage as it does to the skin, only more severe, since the breathing surface of the lung is far more delicate and vulnerable. This is why the residents moving back into the area were forced to wear dust filter masks as well as the participants in the rescue operation. The dried dust is a potential alkali since NaOH present in the original solution phase is contained in small crystalline form, thus the inhaled dust immediately creates a strong alkali reacting with the water content of the lungs. In order to reduce the formation of dust in the contaminated area, calcium chloride powder was originally planned to be scattered, as it has an absorbent quality, extracting moisture from the air to prevent the spilled red mud from drying out. The $CaCl_2$ is hygroscopic, i.e. absorbs humidity, thus a solid crystalline material gradually liquidifies (i.e. is transformed into a concentrated solution). Moreover, this salt is hydrolyzed in slightly acidic manner, neutralizing the lye to a limited extent.

Summary

- The accident took place at 12:25 pm on 04. 10. 2010. The red mud spill following the dam break reached the municipalities of Devecser, Kolontár, Somlóvásárhely, Somlójenő, Tüskevár, Apácatorna and Kisberzseny. The red mud contaminated the valleys of the Torna creek and the Marcal river, almost reaching the river Rába. Through the Torna, Marcal, Rába and the Moson branch of the Danube, the alkaline slurry entered the Danube, causing destruction in all the affected waters. Along the Torna and the impacted section of Marcal, practically all aquatic life was destroyed.

- The disaster left 10 people dead and almost 150 slightly or severely injured, including local residents and the participants in the rescue operations.

- The spilt mud and alkaline slurry polluted about 1,000 acres of land. The amount of the emitted pollutants was about 0.9–1 million cubic meters.

- The fact that the devastation wrought by the dam break significantly exceeded the expected impact as specified in the disaster management plan can be accounted for in physical terms by the exceedingly large water content of the slurry stored in Basin X, and from a chemical perspective by the alkalinity of the spilt liquid, which approached pH 13. The relatively high concentration of metals (arsenic, mercury, etc.) in the pollutant mix has also presented further health and environmental problems.

Recommendations

- Based on the experience of the Kolontár accident and the inundation models derived from it, the disaster management plans for facilities with high environmental risk should be urgently and thoroughly revised.

- Differentiated limit values for metals and other toxic substances need to be established with respect to soils contaminated through industrial activity (mining, ore processing, chemical industry, galvanic industry, leather manufacturing etc) and accidents. These limit values shall also be adapted to later land use. Breaking with current practice, these requirements should ensure that it is not only sewage sludge related limit values that are used as benchmarks when assessing environmental health risks or fulfilling recovery objectives.

- When the occurrence of an accident proves that a given technology is hazardous, general regulation should be adopted to ensure that no permission is granted to resume the industrial activity unless the technology used is significantly modified in a way that effectively reduces the environmental risks entailed.

Alkaline slurry among the houses —is soil replacement the solution?

3. Damage control

3.1. Actions by the authorities

As indicated above, the competent county offices of the Central Agricultural Office immediately declared a ban on hunting and fishing on the day of the disaster (at 16 o'clock in the afternoon). The sales and use of contaminated food and feed products was prohibited through official action by the Chief Veterinary Officer. In the wake of the disaster, Secretary of State for the Environment Zoltán Illés suspended production at MAL Co. Ltd. with immediate effect, simultaneously directing the company to restore the reservoir in the area of Ajka.

Based on the decision of the Defence Committee, the construction of four stone barriers between the red mud reservoirs and the village of Kolontár was started so that they could slow down sludge spill and reduce its destructive power in the case of a potential further breach of the reservoir dam. The fourth barrier was built on the territory of the municipality itself.

On 5 October, the first response of the government to the disaster was to issue a government decree declaring a state of emergency and defining a range of organizational, financial and communications tasks related to damage control.

"Acting upon the authority defined by Article 35, section (1), point i) of the Constitution, and based on Article 149, section (3) of Act CV of 2004 on National Defence and the Hungarian Defence Forces, the Government issues the following Decree:

1. § (1) The Government declares a state of emergency according to Article 2, section (2), point f) of Act XXXVII of 1996 on Civil Protection in the administrative area of Győr-Moson-Sopron, Veszprém and Vas counties.

(2) In the area impacted by the state of emergency, the measures stipulated by Article 159. (1) - (3), Article 165, Article 168, Article 169, Article 173 (1) - (2), (3) a)-c), (4), Article 186 and Article 195 of Act CV of 2004 on National Defence and the Hungarian Defence Forces (hereinafter referred to as NDA) shall be applied.

(3) On the basis of Article 8, point b of Act LXXIV of 1999 on the Management and Organisation of Disaster Protection and the Prevention of Major Accidents Involving Hazardous Substances, the Hungarian Defence and Police Forces may be called in to assist with the elimination of the state of emergency.

2. § (1) The Minister for Rural Development shall perform ministerial duties relating to the rectification of environmental damage according to relevant regulations. The Defence Working Committee shall function within the Ministry for Rural Development. The Minister for Rural Development shall direct the activities of the Working Committee.

(2) Governmental communication activities related to the elimination of threat in relation to the state of emergency referred to in the present Decree shall be coordinated by the Minister Of Public Administrative And Justice .

(3) Government shall provide funding for reasonable defence-related expenses occurring after 12.30 pm on 4 October 2010 from the general reserve of the budget or otherwise for the participants in the activities of protection.

3. § The present Decree enters into force at 3 pm on 6 October 2010."

A few days after the disaster, the Hungarian Financial Supervisory Authority learned from several sources that a number of disaster victims with mortgage loans in the red mud disaster stricken communities received a formal notice from their credit institution. For the majority of mortgage contracts, the contract is immediately terminated by the bank if the mortgaged property is destroyed. The Authority drew the attention of the banks to points IV. a) and b) of the Code of Conduct, which clearly define the procedures to be applied to handling payment difficulties. The institutions subscribing to the Code had undertaken to develop bridging solutions for these cases, and to notify customers through a letter or infor-

mation brochure. As terminating the contracts of clients having lost the loan collateral in the disaster would have disastrous consequences on these debtors, the Authority took the firm position that developing bridging solutions is the only solution sufficiently taking into account the multifaceted aspects of the present case. The Authority sent an executive circular to the financial institutions concerned, specifying the behaviour expected. The Financial Supervisory Authority set up a dedicated legal aid customer service operating during opening hours to address mortgage problems related to the red mud disaster.

On 11 October, the police took the CEO of MAL Co. Ltd. under custody and initiated pre-trial detention. The company's assets were seized. The same day, National Emergency Director General György Bakondi was appointed Government Emergency Commissioner. Parliament adopted an amendment to the NDA to the effect that the operation of business enitities may in the future be brought under the supervision of the state through a Decree, with the Minister or the Government Commissioner acting on behalf of the state.

The Governmental proposal was voted for by the majority of parties in Parliament, with the parliamentary group of LMP abstaining from the vote. The ecological party did not object to placing MAL Co. Ltd. under the state supervision, but warned that the proposed amendment was too vague as the scope in which it would enable placing companies under state supervision was too broad and not sufficiently clearly defined. Furthermore, it was less accurate in its provisions on the conditions and duration of maintaining supervision than would be required by the rule of law.

The Emergency Commissioner was granted the following competences: a right to overview the financial condition of the business entity, to endorse and countersign financial obligations the business entity would take on and to take decisions on matters within the competence of the entity's main decision making body with a view to directly eliminate the conditions that have lead to the adoption of the extraordinary measures or to mitigate their consequences. The Hungarian State shall notify, in writing, with immediate notice, the entity's senior officials and members of the Supervisory Board regarding decisions taken on matters within the competence of the entity's main decision making body. This right of decision making does not otherwise affect the competences of the highest decision making body of the entity. The Hungarian State owes the business entity or its owner compensation amounting to the value of the damage in effect incurred by decisions of the Commissioner in its competence for the period when a decree is in force that the Constitutional Court would later annul.

On 12 October, the National Public Health and Medical Officer Service (ÁNTSZ) published its findings concluding that drinking water quality is suitable and access to drinking water is secure in the area flooded with red mud. In the preceding week, the public health authority carried out a detailed analysis of 68 drinking water samples taken from 8 settlements of the area impacted. The samples included seven samples taken from drilled wells. The values did not deviate from the usual indicators of water quality, indicating appropriate water quality. Based on the results, Disaster Management added that the drinking water bases were not acutely impaired from any direction by the disaster. The National Public Health and Medical

Officer Service and the Central Transdanubian Environmental, Nature conservation and Water Management Inspectorate jointly performed air quality tests in Kolontár and Devecser. Based on data obtained by common standardised measurement methodologies, the concentration of airborne fine articulates did not exceed limit values between 7 to 10 October, i.e. the period for which airborne fine articulates were an increasing problem due to drying of the red sludge. Nevertheless, based on the test results the bodies communicated that wearing FFP2D dust masks was deemed secure and generally recommended. Eight air pollution measurement points were established, in the municipalities of Ajka, Devecser, Kolontár, Tüskevár and Somlóvásárhely, among others. According to measures by the National Public Health and Medical Officer Service, dust concentration in the air only exceeded the limit values in the disaster impacted area (in proximity of the dam break). In this area, wearing a dust mask was made compulsory for participants in the rescue operations.

Minister for Rural Development Alexander Fazekas announced on 5 November in Kolontár that Csaba Szabó was commissioned to oversee tasks of coordination and consultation related to restoration activities and the exchange of real estate plots in the region flooded by the red mud. The mandate of the Ministry Commissioner ran from 5 November 2010 to 5 May 2011. Csaba Szabó coordinates activities and acts on behalf of the Ministry in all areas of competence of the Ministry of Rural Development, consults with producers in the area on exchanging real estate plots or participation in the cultivation of energy crops. His tasks also include keeping contact with local governments and businesses, as well as to ensure accuracy in damage assessments. At the same time, works to plant the material dudarit into the soil was begun under the supervision of the Central Agricultural Office to neutralize alkalinity on the 150 hectare site that was covered by a thin layer (1-2 cm) of red mud.

3.2. Anomalies of central communication

The first days and weeks following the disaster were characterized locally and the national level by a lack of information and a multitude of false information simultaneously. The situation was made worse by the fact that the relevant administrative authorities (environment, health) communicated with delay and in a manner constantly aiming to shift off responsibility. The "mouth gag" of authorities can be directly associated with legislation adopted following the change of government under which the members of staff of the authorities can be made redundant without either justification or substantial compensation. Layoffs (the professional justification of which was regularly questioned by the press) did indeed start in August and September, thus professionals employed by the state would have had to make statements in an atmosphere characterised by apprehension, exposed to the risk of job loss, when they found themselves dealing with an environmental and environmental health disaster of extraordinary complexity, without precedent in Hungary.

As Greenpeace pointed out: "In the first weeks, the quality of the information provided was below classification. Concerning spilled toxic substances, the National Public Health and Medical Officer Service concluded on the second day after the event that the concentration of all potentially hazardous materials was below the risk limit - referring to measurements carried

out in 1987! The Hungarian Academy of Sciences reached essentially the same conclusion on the third day. Similarly, the National Public Health and Medical Officer Service confirmed this one week after the accident, based on recent measurements. Meanwhile, the lungs, skin, and mucous membrane of thousands of people in the zone were exposed to contact with an unknown mixture of toxic substances. In order to avoid suffering serious damage to health, they should have been provided accurate and honest information and adequate protective gear. They received neither.

Greenpeace was the first to inform the public of the results of effective measurements on the fourth day of the disaster. A high concentration in arsenic was measured, about 25 times the authorised limit for groundwater in the drainage ditches. The two other noxious heavy metals they tested, mercury and chromium were also significantly over the limit."

The official communication channel of the Ministry of the Interior, i.e. the website vorosiszap.bm.hu went online on 5 October. However, it was only on 8 October, viz. four days after the dam broke that the first summary appeared on the site including the most important (but by no means exhaustive) health related information concerning the contamination, crucial both for the local population and for those taking part in the damage rectification efforts (http://vorosiszap.bm.hu/?p=50).

In the most critical period, the regionally competent environmental authority provided no significant information relevant to the general public at all. Even at the time the present report is being compiled, i.e. February 2011, the website of the Inspectorate (kdtktvf.zoldhatosag.hu) contains nothing more on the disaster than the authorizations and decisions concerning the functioning of Mal Co. Ltd.

Following the accident, a series of reports appeared in the media on the health effects of red mud, indicating that the contaminant is potentially radioactive. Nevertheless, ANTSZ failed to provide comprehensive information about the actual impacts and risks earlier than 25 October, that is, three weeks after the accident (http://www.antsz.hu/portal/down/kulso/kozegeszsegugy/iszaptarolo_szakadt_at/lakossagi_tajekoztato_20101025.pdf).

In its decision dated 5 November, the government declared that it was Mal Co. Ltd. that caused the disaster. In an official communication, the legal representative of the company responded that "The concept of the government stipulating the identity of the party which caused the damage in any case is shocking by any means, as well as unprecedented from a legal point of view. Furthermore, the government's taking sides regarding the issue of liability would be utterly unacceptable, given the fact that final expert advice was not even given on the causes of the disaster themselves. It is up to the judicial bodies, and ultimately to the court to declare a decision on both the issue of harm and that of liability, and that only following an appropriate and fair procedure exploring the causes of the event."

In addition, it was a striking deficiency of communication that the residents of the area affected by the accident did not have any substantive knowledge of the potential risks of the dams breaking, of the consequences of exposure to red mud, or of the actions capable of reducing the effects of the disaster, even though there is a strong tradition of providing preliminary information in areas characterised by industrial activities with high environmental risk (for example, the Paks Nuclear Power Plant) in Hungary. This lack of information significantly contributed to the severity of the damage wrought on human lives, health and finances.

3.3. The communication of MAL Co. Ltd.

"The red mud is not dangerous." "It can be hosed off by a strong water current." "They say I should feel responsible, but I do not." These quotes are taken from the first communication of Zoltán Bakonyi, the director of Ajka Alumina Plant (a subsidiary of MAL Co. Ltd.), voiced with a delay of one day after the disaster. By this time, three villages had been flooded, three people were left dead and more than a dozen were treated in different hospitals, mostly for injuries of alkaline burn, similar to ordinary skinburn.

The company executive explained that it was the water layer from the top of the reservoir, containing sodium hydroxide that had flooded the area, taking with itself sludge and soil from the agricultural areas on its way. The water in the sludge reservoir is an inherent feature of the wet disposal technology, while the alkaline liquid can actually irritate the skin if it comes into contact with it. According to Mr. Bakonyi's words, about 97 to 98 percent of the sludge that had originally been stored in the reservoir remained in place even after the dam broke, and it was not to be expected that the clay-like substance, condensed in large blocks of material would move further (based on this account—as well as on the experience of subsequent on-site inspections—the construction of hastily erected protective emergency barriers between the reservoir and Kolontár was largely unjustified). Mr. Bakonyi argued that the disaster was caused directly by the fact that recent heavy rains have rendered the claylike soil so sodden below the external wall of the reservoir built 25 years previously that it could not withstand the pressure of water (this claim has not been confirmed in tests carried out since, though it has not been refuted either).

On the same day, MAL issued a corporate statement regarding the disaster. "Many people learned from the media that a natural disaster took place on 4 October 2010 at 12:10 pm when the dam of red mud reservoir basin 10 of the Ajka alumina plant owned by MAL Co. Ltd. broke, an event without precedent in the history of the Bayer alumina production process. The management expresses the deepest regrets to all residents who have been personally impacted by this disaster, and expresses condolences to the families who experienced the worst human tragedy, the loss of a family member." The suggestion that what happened was in fact a natural disaster have not been confirmed by the investigations so far. Rather, it seems to be the case that human errors, omissions, bad decisions and technological reasons together have led to the accident.

The following statement acknowledging responsibility was only issued on Thursday, 7 October, that is, three days after the accident took place. Subsequently, however, the company made constant efforts to spread out and relativise this responsibility. "In the 1997 privatization contract, the state imposed that a number of environmental investments be carried out by the company purchasing the plant with the sludge reservoir. One of the requirements was to build watertight slurry walls which would seal off the reservoirs below the ground, going down 10 to 18 meters vertically. These watertight slurry walls would reach down to the first impermeable layer, in a way that no release of harmful substances may take place. However, the resulting quasi-artificial underground pools thus created below the reservoirs also obstructed the path of large amounts of rainfall to flow off or leak away. The authorities and institutions of the state that ordered the construction of the slurry wall thus likely failed to consider the fact that the

large amounts of precipitation getting and filtering through here would change the behaviour of the subsoil, in particular the soil solidity. Thus on the basis of known prior expertise, the responsibility is shared: a reservoir began to be constructed in the mid-80s, upon order by the Hungarian Aluminum Industry Trust, owned by the Hungarian state. The reservoir design and construction was also implemented by state-owned firms. The building permits as well as the 1990 use permit were also issued by public authorities. When the company was privatized in 1997, the purchaser was justified to believe in good faith that there was nothing wrong with the reservoir since the constructing party, the seller and the company formerly operating the reservoirs each had all the required licenses. In addition, in the contract dossier amounting to nearly 100 pages including annexes, the buyer was nowhere informed that Basin 10 or the subsoil below the reservoirs would present any special features (e.g. different soil structure, etc) that needed to be addressed on their own. Construction of the slurry walls was required and the company did indeed construct them as there was a statutory obligation to do so.

Consequently, the company purchased the reservoir in good faith, though the reservoir had hidden faults in all certainty, as shown by the recent events. In addition, the competent public authorities constantly monitored the operation of the reservoirs and found it satisfactory in all cases."

On October 10, the company considered it timely to express once more its sympathy to the victims' relatives. "The Management and all employees of MAL Co. Ltd. were all deeply shaken by the disaster that occurred. We wish once more to express our deepest regret to all victims, the injured and the impacted and their families. The outmost efforts are made to rectify the damage. We work closely with all bodies involved in order restore normal conditions in the region as soon as possible."

On this day, the company issued a further notice denying that it had been aware of the Winkler soil study. As far as we know, this was the only document of expertise which drew attention to the risks imposed by the geo-morphological characteristics of the reservoir area prior to the accident.

"As reported by the press, physicist dr. Gusztáv Winkler (a senior lecturer at the Budapest University of Technology) conducted environmental studies in the region of Mosonmagyaróvár and Ajka at the end of the 1980s, i.e. at around the time when the foundations of reservoir 10 of the alumina plant were laid. The study states that soil of the region mostly consists of the floodplain meadow of Torna creek, an area with a flooded, swampy, meadow-like character without water outlets, enclosing a block of clay right at the northern wall of the reservoir. When saturated by precipitation or groundwater, this soil will move, but in a way that the different blocks of soil with dissimilar composition and structure are likely to show displacements to varying degrees. These displacements of several centimetres might be probing for the wall of the reservoir. The expert behind the study argues that this assumption is supported by the fact that the dam broke on Monday at the meeting point of two kinds of soil, and not only at the corner as shown by aerial photographs, but in another section of the wall as well. The block of clay was likely home to a phenomenon reducing the rate of friction which could have contributed to the disaster. According to the studies conducted by MAL Co. Ltd., its staff was not aware of the findings of the study. The management stated that they had no knowledge of negative circumstances regarding the design phase or subsequent construction. The

representatives of MAL Co. Ltd. which had purchased the shares of the Ajka alumina plant added that the privatization documents or the published tender did not include this kind of information, thus they received no warning or information about the existing risk factors. The company also denied allegations in the media suggesting that it had contacted senior lecturer Gusztáv Winkler concerning the research. Since then, the company had consulted Gusztáv Winkler with respect to the document. The investigation by MAL Co. Ltd. also addressed the issue of who abused the company name when approaching the senior lecturer in search of the construction design."

A summary of the results of the Winkler study is currently available on the Internet (http://www.pannonpalatinus.hu/up/pdf/185.pdf). The study itself, however, is not available in its entirety.

Concerning the environmental and health effects of the red mud spill, MAL Co. Ltd. only repeated the communication of the Hungarian Academy of Sciences (referred to in detail below).

3.4. Communication steps by LMP and social organizations

3.4.1. LMP

As early as in its communication dated 5 October, LMP formulated the cornerstones that have since been definitive for damage control, clarifying issues of liability and identify of the transgressors. Thus, several factors need to be mentioned and investigated among the causes of the accident, including the activities of authorities in a state of steady decline due to inadequate capacities, misconceptions regarding their duties and continued exposure to political pressures, the flaws in the design, implementation and monitoring of the privatization of the aluminium industry, as well as the deficiencies in the Hungarian regulations regarding reparations for environmental damage. In a press conference on 6 October in Kolontár, Benedek Jávor, the LMP-delegated chairman of the Sustainable Development Committee of the Hungarian Parliament demanded that the Government disclose the privatization contracts of the company involved in the accident which had previously been treated as confidential material.

Four days later, the ecological party defined the steps to be taken to reduce the risk of similar disasters (some of which have since been clearly recognizable in the measures taken by government in response to the disaster).

LMP's Twelve-Point Action Plan (10 October 2010):
"To stop further damage resulting from the catastrophic red mud spill, to rectify its consequences and to prevent future disasters of a similar nature, LMP has developed a twelve-point action plan including short, mid, and long term measures. LMP deems it important that the government acts according to this plan, in permanent consultation with the governmental and non-governmental organizations.

1. strengthening the dams and preventing future dam breaks;

2. the collection, safe disposal and neutralization of the red mud;

3. continuous monitoring and measurement of the concentration of heavy metals, arsenic, mercury, fluorine, PCBs and other contaminants potentially contained in the spilled sludge, the contaminated sites and the surrounding water deposits with regard to allegations that hazardous waste other than red mud might have been deposited in the damaged cassettes;

4. immediate structural engineering and stability testing of other similar establishments, especially the red mud reservoirs located in Mosonmagyaróvár, Almásfüzitő, Neszmély and the investigation of whether waste other than red mud had been deposited in these reservoirs;

5. the revision of the disaster management plans of all domestic hazardous industrial plants, mines, and landfills with a view to checking that they correspond to the actual conditions and that they are based on realistic models of the events that could occur in case of an accident;

6. strengthening the entire system of environmental and construction authorities, increasing the frequency and depth of the inspection by authorities;

7. arevision of the classification and treatment of red mud due to its high pH level, clearly defining it as a hazardous substance and ensuring it is treated as such in the permission procedures without regard to EU regulations that have been defined for substances produced through a different technological process and have lower pH levels;

8. developing the liability insurance system for hazardous industrial plants with mandatory and sufficiently high insurance rates, as in fact defined as a task for legislators by Hungarian environmental law fifteen years ago;

9. a revision of the system of issuing building permits and inspections, with regular mandatory comprehensive inspection of hazardous sites;

10. initiating an EU security fund, financed from the payments of hazardous sites and designed to provide financial coverage in the case of damage that cannot be rectified from other sources;

11. initiating the development of a European directive designed to set up compulsory liability insurance policies;

12. deploying an EU investigative committee with a wide mandate along the lines of those granted to the task force investigating the Baia Mare accident ten years previously, entrusted to draw conclusions and formulate recommendations.

LMP is convinced that measures in line with these twelve points are crucial both for the remediation effort and for preventing accidents in the future."

The European Green Party (EGP) unanimously passed an emergency resolution at its Council Meeting on 10-11 October, supporting the demands formulated by LMP concerning the ecological disaster caused the dam break in the region of Ajka. The EGP referred to the event as clearly one of the most severe ecological disasters of the past decades. Over 300 delegates from 55 countries called on the Hungarian state to ensure that the upper layer of the soil covered with red mud is replaced as soon as possible, thus preventing the toxic dust containing heavy metals and other hazardous components from spreading in the area. In addition, they also joined LMP in urging the authorities to examine the condition of similar alumina reservoirs and to enforce that appropriate disaster management plans be implemented, to be financed by the owners. Representing the fourth largest group in the EP, the European Greens also requested the Hungarian Government to comply with the demand of LMP to make public the privatisation contract of MAL Co. Ltd.

On 12 October, Benedek Jávor submitted six questions to competent government officials:

1. Had Mal Co. Ltd. in fact implemented the HUF 3 Billion environmental investment included in the privatisation contract for the alumina company, which it acquired for a grossly undercut price (HUF 10 Million) during the late '90s? What were the millions of Euros spent on, that Mal Co. Ltd. received as environmental investment subsidies, apparently still unaccounted for in Brussels?

2. Why is Hungarian red mud far more alkaline than would be considered normal in other countries, and why is there no regulation for neutralizing sludge prior to depositing it?

3. How could the Central Transdanubian Inspectorate for Environmental Issues, Nature Conservation and Water Management issue a permit for normal waste disposal when red mud has a pH of 13, and is therefore unquestionably a hazardous substance?

4. How could Mal Co. Ltd. neglect to inform the public or the authorities regarding the issues that have, as unanimously established by local residents, plant employees and a WWF report with photographic evidence, been present for weeks, indeed for months? Why is there no appropriate construction inspection to encompass architectural and structural engineering tests as well as environmental ones?

5. How could the plant's disaster management plan reckon with a 300 thousand cubic meter red mud spill, when spillage thus far amounts to 600 to 700 thousand cubic meters, and in all due probability will approach 1 million cubic meters, with a significant additional quantity still contained in the reservoir? Who ratified the obviously unrealistic disaster management plan?

6. How could government neglect its duty to ensure an appropriate environmental responsibility insurance system, as prescribed by the Environmental Law of 1995, for some 15 years?

Government has not provided reassuring answers to these questions since.

In its October 14th statement, ecopolitical party LMP declared that relocating the evacuated population to the red mud contaminated settlements of Kolontár and Devecser is premature, as official Greenpeace test results report excessive airborne dust contamination in the area, posing a long term health risk. LMP called on competent authorities to exercise far greater caution when resettling the residents, who have already had more than their share of suffering. The statement also makes it clear that there is none of the agencies involved in the disaster fulfilled their duties appropriately. Neither the business corporation nor the competent authorities had taken appropriate measures to prevent the reservoir rupture and the ensuing ecological and property damage. Authoritative legislation had been overdue since 1995, and neglecting its development is a responsibility of the government.

On October 20th, president of Sustainable Development Commission Benedek Jávor, member of LMP, informed representatives of the EU Parliament's Green Group about the disaster via a video conference. He made it clear to members of the Green Group participating an the meeting preceding the Tuesday evening EP session with the Ajka disaster on its agenda that this was the single greatest ecological disaster in Hungarian history, both in terms of human casualties and injuries, and the magnitude of environmental contamination. Immediate and longer term environmental damage was due primarily to the mud's extreme alkalinity, as well as its high concentrations of heavy metals. Jávor also called attention to the deficiencies of both Hungarian and EU regulations that contributed to the event. Under EU regulations, red mud is not classified a hazardous substance, without regard to its alkalinity and heavy metal content. However, due to the alkalinity of the technical process, red mud definitely meets the criteria for hazardous substances in Hungary. In practice, though, Hungarian authorities apply lax regulatory limits, and treat red mud as practically non-hazardous waste.

On October 29th, the party submitted a complex set of legislations to prevent future disasters in light of the Kolontár accident. According to LMP, the most urgent measure is a re-evaluation of hazardous and industrial waste containment, as there is no definitive up-to-date information available on such potential health and environment hazards. Left unchecked, potential sources of contamination may cause immense damage, and the financing of compensation and damages may fall on public funds. LMP wishes Parliament to call on the government to prepare an inventory of the country's hazardous and industrial waste dumps, the substances deposited there, and an estimate for their environmental impact, including alternatives for their elimination and a calculation for expenses.

The recommendation includes a re-evaluation of the recently downsized National Environmental Damage Prevention Programme, an immediate allocation of public funds for rehabilitation costs, and a warranty for the disaster prevention expenses of privately owned hazardous entities. The government ordnance for subterranean water protection needs to be modified, as does the government resolution regarding government responsibility for the rehabilitation of neglected environmental damage.

The ecopolitical party drafted a new legislative proposal for defining environmentally hazardous entities, their annual official inspection, and an independent investigation – conducted by an expert appointed by the environmental authority, not the investigated establishment – of impact, via a modification of the Act on the Environment (Ktv.). Rules of environmental rehabilitation warranties and environmental insurance for third party compensation would also be modified in the Act on the Environment. LMP also moves for modifying the Criminal Code (BTK) to ensure that neglect of supervision duties can be penalized. A category of "endangering through official procedure" would be included in the BTK.

3.4.2. Clean Air Action Group, Greenpeace and other NGO's

On day 2 of the disaster, Clean Air Action Group recapped how on numerous occasions, they had called government attention to the unresolved issues surrounding red mud containment, and had recommended specific legal measures, which had gone without response.

"It is with grave misgivings and deep compassion for the affected citizens that Clean Air Action Group took notice of the flooding of seven Transdanubian settlements by a highly toxic red mud spill. The NGO had called government attention to the issue years ago, demanding immediate action. In 2003, they gave the following statement:

The greatest volume of hazardous waste in Hungary is the so-called red mud, the by-product of aluminum oxide production, which is estimated to total some 30 million tonnes. The problem is twofold. Firstly, the waste poses a massive environmental hazard. Secondly, the production of aluminum oxide and aluminum hydroxide continues to this day, albeit on a smaller scale. Each tonne of aluminum oxide produces 2 tonnes of hazardous waste.

There is a professional consensus to the effect that red mud poses environmental problems:

- active dump areas appropriate valuable agricultural land,
- wind carries dry red mud dust clouds to remote settlements (10–15 km),
- the mud's liquid alkali content seeps into the soil, endangering local vegetation and drinking water supplies.

During privatization, proprietors agreed to warrant environmental costs of ten thousand million Forints, but despite this fact there has been no mention of any such responsibility, though by law it is public information.

Our EU membership requires rigorous action in this field. We suggest the initiation of an international campaign for the elimination and environmentally sound reutilization of red mud reservoirs, requesting support from EU countries and other developed nations. Government should draft a programme to this end. This would ensure thousands of long term jobs.

As undertaken during privatisation, environmental remediation and recultivation must commence. This does not entail any short term income for the state budget, but it waives state responsibility for several ten thousand million forints' worth of environmental remediation expenses.

Clean Air Action Group had repeatedly submitted its recommendation to several government representatives, but has not received meaningful replies.

Red mud reservoirs pose a threat to drinking water catchments in several locations. The situation is especially worrying at the MOTIM reservoir in Mosonmagyaróvár, where red mud is contained right above the water catchment—a place restricted even for communal waste disposal. An expert from Clean Air Action Group had filed suit at the prosecutor's office, and received the following response: 'Due investigation was given to all the processes and decisions concerning MOTIM Co. and its legal predecessors. It is hereby declared the decisions are sound and comply with the laws then in force. Accordingly, no action from the prosecutor's office was necessary.' It is not so much the prosecutor's office that was responsible for the erronous reply and for the failure to take action as the competent environmental authority, which—according to reports—was put under considerable political pressure and did in fact misinform the prosecutor's office.

Clean Air Action Group had also repeatedly called attention to the issue of limited responsibility—likewise to no avail. The immense environmental, health and property damage is usually suffered by the injured parties, and compensated by taxpayers, as the companies responsible for the damage are unable to cover damages. To this end, Clean Air Action Group encourages the obligation of companies conducting hazardous activities to take out insurance, as well as for their allocating a fund for full compensation for possible damages.

Clean Air Action Group also demands that the government immediately publish the relevant privatisation contracts, to clarify who and to what degree bears responsibility for the disastrous situation.

This event and its cost in human lives, serious injuries, immense material damage and ecological devastation all underscore that government must adopt a far more responsible attitude toward environmental organizations, their experts and their warnings.

Assessment of environmental damage and impact must begin immediately, and results must be made public. Remediation must also commence without delay, before the contamination spreads any further."

On October 7th, major Hungarian environmental organizations made a joint statement regarding the disaster.

"Environmental organizations' statement regarding the red mud disaster

October 7th, 2010

The undersigned environmental NGOs consider the preservation of public health, healing the injured, remedying damage and preventing further damage to be of topmost priority in the red mud contaminated settlements. We call on the general public, NGO's, corporations and institutions to join forces with government bodies to aid these operations. We also extend our sympathy and solidarity to those affected.

However, this disaster plainly calls for further action.

It is necessary to conduct a far more detailed national survey of potential environmental

threats, as well as expediting the remediation of existing damage. Though the process had initiated after the system change, it has since slowed to a near halt. However, as this present case proves, nature is less indulgent. At the present rate of remediation, we are risking further disaster and loss of life, and compensating damages costs us far more money than remediation would.

It must be avoided that innocent victims and taxpayers bear the costs of damage, instead these should be fully compensated by the injurious party. To this end, companies conducting hazardous activities should be required by law to take out insurance for all possible damages, as well as to allocate funds for full compensation. A further option is for a state tax on relevant activities to ensure funds for possible damage management.

State subsidising of heavily polluting activities and exploitation of non-renewable fuel must be stopped. One form of subsidization is when the injurious party is not held financially responsible for environmental damage caused. It would seem an efficient measure to raise the currently moderate mining annuity.

Expanding and improving environmental and health care vocational training is essential. A majority of the population is currently incapable of protecting their environment or health, and is uninformed of what to do in case of an environmental disaster.

Affected settlements and companies everywhere must compose disaster management plans, which they must be capable of carrying out. Competent authorities must supervise this rigorously!

Furthermore, injurious parties must be penalized in a strict and exemplary manner.

Environmental NGOs have voiced these suggestions in the past. We are hopeful it will no longer be necessary in future, when government implements the measures listed above."

In their joint letter of October 12th, Clean Air Action Group and Greenpeace asked the Minister of Interior the reason why, more than a week after the accident, there was still no clear information available regarding the composition of the mud spilled, or of the particulate air contamination.

"For instance, it seems incomprehensible that even though tests are reported by the press to be conducted on a daily basis, it is still not known exactly what kinds of toxic materials are inhaled by and absorbed through the skin of the workers on site and local residents. How can it be possible that the National Public Health and Medical Officer Service issues a reassuring statement on the basis of tests conducted at the Ajka Alumina Plant in 1987? As long as no comprehensive public data are made available about the exact nature, concentration and territorial dispersion on the polluting materials, the appropriate level of protection and of the proper protective wear cannot be determined for the people staying in the contaminated area.

The NGOs are committed to the view that residents must be informed continuously, coherently and in detail, and presently we are quite far from that. Deficient information endangers people's most precious treasure, their health. All the local people and rescue workers are rightly concerned about it in the swirling red clouds of dust.

That is why it is important to test the chemical composition of the contamination at a sufficient number of locations, with regard to the oxidation state of the metals involved since, for

example, chrome (III) is not particularly toxic, chrome (VI) represents a serious health hazard. In terms of neutralisation, composition is particularly important for while alkali absorbs toxic metals, they could get off the environment under the effect of acid causing a long-term problem.

On the day following the accident, the Disaster Management very properly drew up strict regulations, preparing for the worst: 'For the protection of the health of all those, who take part within the endangered area in the rescue and cleaning operation of the grounds and the properties, shall wear Wellington boots, closed clothing, acid and alkali-proof protective gloves and safety goggles in case of the risk of spillage.' According to information reported by the press, several firemen and disaster management employees suffered injuries and possibly health damage due to insufficient preparation. Because the composition of the toxic materials is still unknown, it cannot be concluded for certain that they had received the proper types of safety masks.

Greenpeace and the **Clean Air Action Group** suggested in addition that the enrichment of toxic materials in the system of rescue workers and local residents should be equally checked. Dry red mud getting into the air is a health risk if inhaled or if it gets into contact with the eyes or skin. Measures must therefore be taken in order to ensure the protection of the residents of the region as well, as wind can carry the toxic dust away, even 10-15 kilometres far. Red mud must be cleared away the fields as soon as possible to prevent the wind spreading it around the neighbouring villages.

Not only the people but animals in the region inhale the dust which may contain toxic metals. Therefore, measures must be taken to protect animals from disease, and, furthermore, to prevent the production of food out of these animals as it could be a health hazard for people who might consume it."

On October 15, Greenpeace protested against the hastily issued permission which allowed residents to return:

"Greenpeace, the international environmental organisation protests against the return of the residents and the re-opening of the Ajka Alumina Plant of MAL Co. Ltd. The exact causes of last week's red mud disaster are still not clear, but, in spite of the fact, the government decided to let the production restart.

Greenpeace regards the permission on the return of the residents of Kolontár as an utterly irresponsible decision. Up to the present, there is no reassuring data published by anybody which would prove the safety of staying in Kolontár in the long term, and nobody provided exact information about the short-term and long-term health effects of the high concentration of fine dust particulates in the air.

- Wearing dust masks and local damage limitation can only be a solution for a short-term stay. But the presence of dry red mud in the form of dust or otherwise is a threat to the health of local residents. Do decision makers seriously think that the people of Kolontár have to wear dust masks from now on in 24/7? – asked Zsolt Szegfalvi, the Director of Greenpeace Hungary.

According to the information of Greenpeace, the technology applied by MAL Co. Ltd. in its Ajka Alumina Plant does not meet today's requirements. The red mud made during the production here is highly alkaline. This fact only increases the risks if another accident takes place.

- How can it be possible that the German red mud is less harmful than the Hungarian one? In our opinion, we deserve the same safety levels as enjoyed by citizens of Western Europe have, Mr Szegfalvi added.

As a result of a political decision the operation of MAL Co. Ltd. was placed under the control of the Hungarian state and the restart of the production was permitted by state authorities. However, the opinion of an independent international committee of experts is required as presently the operator and the licensor are in a hierarchical relationship which does not guarantee proper safety.

Greenpeace Hungary asks the government to suspend re-opening the plant until the circumstances of the disaster are elucidated and environmental and health hazards are significantly reduced."

The statement of Csalán Environmental and Conservation Association (Csalán Egyesület) drew attention to a number of fundamental legal and environmental issues:

"Csalán Environmental and Conservation Association is seriously concerned about the events of the red mud disaster which flooded Kolontár, Devecser and five other villages of Veszprém county and expresses deep compassion for the citizens of the affected region whose life were destroyed overnight by the poisoning.

The association finds it outrageous that fate of people is turned to the worst due to careless and irresponsible industrial activities in our immediate environment. This raises the question who could set limits to the hazards of industrial activities and what is the point in the various laws and regulations considered as strict if such ecological disasters can destroy the lives of thousands? Who will pay for the damages caused by irresponsible behaviour? In fact, is it possible at all to compensate for the destruction of people's homes? Do residents living near the reservoir have the right to know the nature of the risks in their environment and what to do in case of a disaster?

We all know the answers to these questions. We have the right to know what exactly the continuation of industrial activities in our environment entails even if the state authorities have an obligation to monitor them and ensure all precaution is taken to prevent such disasters in the future. And yes, the residents of the red mud affected municipalities have the right to accurate information about the composition of the red mud flooding their homes and gardens so that the proper precautions be made even in these degrading circumstances."

3.5. Assessment of the disaster management

Some of the most important and most urgent disaster management tasks were conducted carefully and on time by the government.

These included:

- The suspension of the production at MAL Co. Ltd;
- The evacuation of the residents and the organisation of their supply;
- The maintenance of public order and public security in the affected area;
- The protection of the drinking water reserve;
- The organisation of environmental and public health monitoring;
- The localisation of risks threatening surface waters;

At the same time, a number of unnecessary or ill-advised steps have also been made besides the above examples:

- The construction of highly expensive temporary dams between the damaged reservoir and the flooded villages was controversial. (Several experts have expressed that there was no risk of another sludge flood which affecting the nearby villages). Nevertheless, this can be explained by the intention to prevent another possible disaster;
- The neutralisation of the alkaline spillage by gypsum and sulphuric acid delivered form faraway parts of the country. (Less harmful materials could have also been used including less industrial contamination and these could have come from regions closer to the damaged area);
- The relocation of residents was started too early;
- The removal of slightly contaminated soil in areas where harrowing and neutralisation could have been the appropriate solution.

Furthermore, some clearly wrong decisions have equally been made:

- First of all, there have been severe shortcomings in the information provided for local people and the public. Both the data provided in relation to the disaster and later the crucially important information on public health issues (dust contamination, etc.) were made available with delay, partially or not at all;

- The remediation of agricultural fields was started with delay and without a clear strategy;

- The distribution of the aid collected from public contributions has not been started yet (until February 2011);

- Local residents reported to have observed abuse in the distribution of material goods offered by individual donors or companies;

- The compensation for damages to real estate started in ways that were unjust and contrary to the promises originally made. However, the claims raised were redressed later on;

- The transportation of contaminated soil and the spilled red mud was organised on public roads, although sufficient railway capacity was available in the contaminated area.

Summary

- Following this unprecedented accident the authorities responded with the expected rapidity and decisiveness, but not always efficiently in the defence of human health, the environment and material assets impacted by the disaster or at risk. One reason for the fact that intervention was not efficient enough was lack of information (local residents and participants in the rescue operations were not informed as to the composition and pH value of the red mud, the biological effect of the slurry, the list of materials to be used in restoration and whether they were available). The defective communication structure was a further reason (crucial information on environmental health issues was published with a delay of several days, with significant initial inaccuracies). As a result, for several days the people impacted were on multiple occasions forced to make decisions potentially influencing the rest of their lives based on conflicting information (e.g. "the red mud is not harmful" vs. "the red mud is toxic and/or radioactive").

- The deficiencies of governmental communication characterising the first days after the accident were primarily mitigated by non-governmental organisations (Greenpeace, Clean Air Working Group, etc.), as they were the sources of communication regarding measurement data and useful health advice.

- The activity of the authorities in such extreme cases should be characterised exclusively by professional objectivity and based on firm legal foundations in order to preserve the trust of the public. This was however contradicted by the temporary arrest of the CEO of MAL Co. Ltd., which later turned out to be untenable; the "assurance" given by the Prime Minister on the issue the detention; the act of placing the company under state control and the allocation of liability for the accident to MAL Co. Ltd. (too early, without genuine investigations).

- On the 6th day after the accident, LMP drew up a comprehensive package for the government on the disaster management measures. The proposals did not fail to consider ecological concerns, and have since been substantiated as relevant and accurate. On the next day, The European Green Party declared support for LMP's claims. LMP raised the issues that have been at the focus of investigations ever since (e.g. the privatisation of the aluminium industry, the responsibility of the authorities regarding permission for alkaline sludge disposal, technological shortcomings of the reservoirs dam detected previously and the unsuitability of the disaster management plan). On 29 October, the party presented a proposal for legislation which could significantly reduce the chances of and the risks posed by similar disasters, however, the proposal was not supported.

Recommendations

- The official communication for major environmental disasters should be organised, including creating the legal background, clarifying responsibilities, communication channels and deadlines. When disaster strikes, it is especially important to provide adequate information to the residents in line with regulations such as the Aarhus Convention, the Act on Data Protection, the Act on the Environment, the Act on Freedom of Electronic Information etc.;

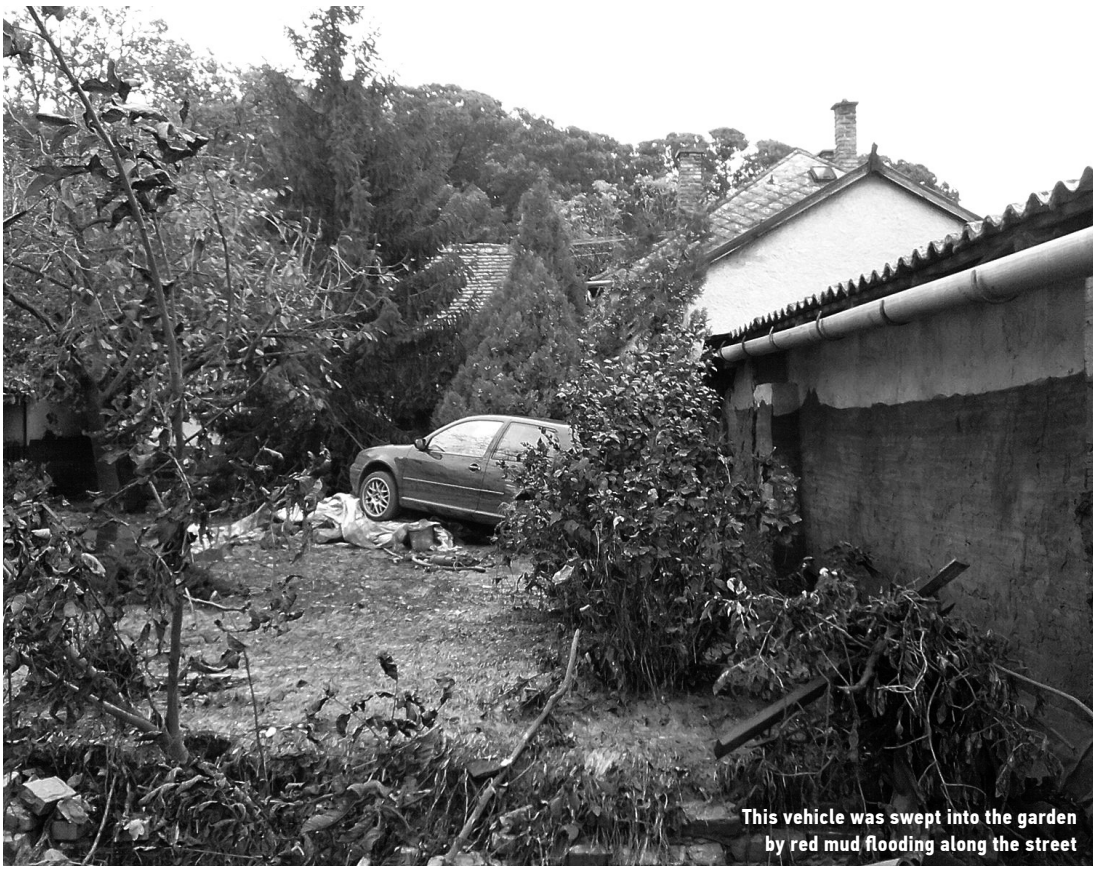
- All governments should adhere to rule of law standards even at times of environmental disaster. The problems encountered should be tackled within this framework;

- There is need for statutory authorities to implement a yearly compulsory audit of environmentally high-risk facilities, including substantive testing, with the participation of experts independent from the authority;

- In the procedure of issuing environmental permits, environmental impact assessment studies need to be prepared by experts working independently from the issuer of the permit;

- An EU-wide security fund needs to be set up, financed form the contribution of hazardous plants for damages that cannot otherwise be covered;

- There is need for an EU Directive on compulsory environmental liability insurance policies.



This vehicle was swept into the garden by red mud flooding along the street

4. Contamination reports

4.1. Initial reports based on earlier tests

A range of conflicting data and statements had been aired following the red mud disaster, pertaining to the constitution of the sludge, its toxicity and environmental impact. Immediately after the disaster, information was published on the official website of the National Directorate General for Disaster Management at the Ministry of the Interior about the red mud spill.

RED MUD

A by-product of alumina production. The material is thick like sour cream, strongly alkaline, thus has a caustic effect on the skin. The mud contains heavy metals, including lead, is mildly radioactive, and inhaling the dust may cause lung cancer.

A by-product of alumina production (the first phase of the of aluminium production), red mud has severe adverse health effects, thus it is classified as a category 2 hazardous substance. It is highly alkaline and contains large quantities of toxic metals including lead. Due to its alkalinity, red mud produces a caustic effect on the skin, and should be washed off immediately with plenty of water in order to neutralize it. The substance is radioactive, but because of its low activity, the direct risk of radiation is negligible. However, the wind may carry radioactive materials from areas nearby, so inhaling the substance may even cause lung cancer. On average, producing one ton of aluminium results in three tons of highly alkaline red mud produced. *(Source: Directorate for Disaster Management)*

According to the communication, [the] "mud contains heavy metals, including lead, is mildly radioactive, and inhaling the dust may cause lung cancer". This information was replaced on October 5th with data supplied by the National Public Health and Medical Officer Service (ÁNTSZ) (4.1.2). Later tests disproved the claims of high lead concentration and hazardous radioactivity. Lead and radioactivity warnings were therefore misleading.

4.1.1. Statements of MAL. Co. Ltd.

MAL. Co. Ltd. CEO and stakeholder Zoltán Bakonyi stated the day after the disaster, that the sludge was harmless, despite abundant news reports of countless alkaline burn injuries. When asked why several people suffered burns, he could not give an adequate reply. It was due to unfounded and misleading allegations that many affected local residents refused to believe that the red mud contained no other toxic materials.[1] During initial forum discussions, the residents referred to Kolontár as a dead village, and many declared they are afraid to return to their dwellings for fear of health risks. Continual uncertainty among residents has been due partly to initial information provided by Disaster Management and its later modification by the Public Health Service.

During the first days of the disaster, MAL. Co. Ltd. management denied responsibility, claiming that "sometimes, despite the most rigorous control measures, such disasters will happen", and also stressing that heavy rainfall contributed to what they called a natural disaster. Company management insisted they had adhered to all regulations to the letter, and opined that their claim was bolstered by the fact that official inspections also found the maintenance of the sludge containment in perfect order.

4.1.2. Initial reports and statements of the National Public Health and Medical Officer Service (ÁNTSZ)

Immediately after the spill, speculations arose about the toxic materials the sludge may contain. For a long time it wasn't clear whether it was actually red mud or the alkaline water covering the sludge, that flooded the area. According to company management and a number of experts, the latter was the case, while other experts allege that alkaline water containing actual red mud had caused the disaster.

On October 5th, the day after the disaster, ÁNTSZ published a document determining that the red mud is very low in toxic content,[2] including toxic metals. According to their published table, the sludge had a pH level of 11.8. The data seems reassuring, but the document makes it evidently clear that **it is reproducing the 1987 measurements made by the National**

[1] Search for bodies in the Kolontár sludge; [origo]|2010. 10. 05. http://www.origo.hu/itthon/20101005-megtalaltak-a-vorosiszapkatasztrofa-negyedik-halottjat.html

[2] "**What should we know about red mud?**—Background material" – ÁNTSZ Országos Környezetegészségügyi Intézet ÁNTSZ Kommunikációs Főosztály http://www.antsz.hu/portal/down/kulso/kozegeszsegugy/iszaptarolo_szakadt_at/Mit_kell_tudni_a_vorosiszaprol_20101005.pdf

Institute of Public Health (OKI) in 1987, and comparing it to the 2009 maximum soil contaminant values. (6/2009.(IV.14.) KvVM-EüM-FVM joint regulation).

Red mud test results Components measured	**Red mud**
Moisture content, %	30,2
From HNO_3-extract	
Cu mg/kg	23
Cr mg/kg	8,0
Ni mg/kg	29
Pb mg/kg	13
Cd mg/kg	0
Zn mg/kg	11
As mg/kg	4,3
From aqueous extract	
pH	11,8

Table 1: Data from the ÁNTSZ document „What should we know about red mud?", published October 5th, 2010[3]

Furthermore, this document published by ÁNTSZ states that the red mud's *"composition is determined by properties of the bauxite mined, and the discharged, added and residual materials from its treatment"*. According to the document, the sludge awaiting containment contained 10-30% dry matter and had a pH level of approximately 12-13, which contradicts the pH 11.8 featured in the table. **In fact, pH levels of approximately 13 had been measured, exceeding both values specified, and far exceeding the pH 11.8 referred to in the ÁNTSZ table. According to the Hungarian Academy of Sciences (MTA) publication, the material leaking from the storage pool had a pH level varying from 11 to 14.**[4]

The ecotoxicity data published by ÁNTSZ are incomprehensible, lacking any specification of what the table's data actually pertains to (% toxicity), nor is there indication of the sample preparation/solution method used, as well as the lack of a solvent control for the DMSO extract. Nitric acid solution doesn't yield an all-around metal content assessment for the sludge, e.g. arsenic has lower nitric solubility, therefore these values are only partially indicative of the sludge's composition. However, following the disaster, the table's publication caused a communicational disturbance.

[3] http://www.antsz.hu/portal/down/kulso/kozegeszsegugy/iszaptarolo_szakadt_at/Mit_kell_tudni_a_vorosiszaprol_20101005.pdf

[4] http://www.katasztrofavedelem.hu/index2.php?pageid=lakossag_kolontar_vorosiszap2

4.1.3. Initial MTA statements and results —in light of the Greenpeace investigation

According to a release by the Hungarian Academy of Sciences (MTA) of October 7th 2010, the sludge contained no toxic metal.[5] On the third day of the disaster, chief secretary of the Academy Tamás Németh stated that apart from its alkalinity, the spilled sludge has no chemical content exceeding the toxicity limit.[6] In contrast to the reassuring statements from MTA and the data published by ÁNTSZ, considerable media interest was generated by a result published by Greenpeace on October 8th.[7] Greenpeace didn't quote results from tests of years past, but analyzed fresh samples taken from a rainwater ditch in Kolontár on the 2nd day of the disaster. **According to Greenpeace results, ditchwater from Kolontár yielded an arsenic concentration of 0.25 mg/l, which is 25 times that of the maximum contaminant level for tap water or groundwater, and 2.5 times that permissible for industrial sewage sludge. Furthermore, the 40.8 mg/kg result measured in dry samples exceeds by far the permissible 15 mg/kg level for soil,[8] which ÁNTSZ had referred to only 3 days earlier.** ÁNTSZ results pertained to acidic solutions, which yield diminutive arsenic concentrations. Test results for mercury content showed 0.76 mg/kg, exceeding the 0.5 mg/kg limit, and for chrome, a result of 191 mg/kg also exceeds the 75 mg/kg limit. Only the concentration of arsenic was in excess of maximum sewage sludge contaminant levels. When neutralized or diluted, arsenic compounds are precipitated as pH decreases, therefore the arsenic concentrations that living organisms contract will gradually diminish in the natural environment.

The secretary of MTA questioned the credibility of the Greenpeace results,[9] claiming they are referring to two different matters. *"Greenpeace is referring to red mud, the consistency of which is well known, while the Academy refers to those samples taken from the liquid phase of the alkaline spillage"*. Greenpeace results are not representative, as there may have been other pollutants present in the ditches of Kolontár, and they are not representative of the entire area. The reason Greenpeace compared its results with drinking water is that for surface water, there are no definitive maximum contaminant levels, and in the case of arsenic and chrome, the limits for drinking water are the same as for surface water. Pollutants will eventually dilute and disperse, the actual concentrations are therefore established after dilution sets in. Additionally, in theory nobody would drink the contaminated water, or till the contaminated land. As there are no maximum contaminant levels set for red mud contaminants in living waters, all comparison is difficult.

According to the MTA statement, *"the red mud contains no soluble heavy metals in excess of maximum contaminant levels"*. It was later revealed that the MTA had based its statement on

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[5] http://index.hu/belfold/2010/10/07/vorosiszap_mta/

[6] Sludge disaster: soil replacement or special use of soil put to consideration; 2010. 10. 7. http://www.vilaggazdasag.hu/vallalatok/mezogazdasag/iszapkatasztrofa-talajcsere-vagy-a-fold-specialis-hasznositasa-johet-szoba-329782

[7] Sludge far more toxic than official report informed 2010.10.08 http://greenpeace.hu/hirek/p1/rkezdo/i272

[8] 6/2009.(IV.14.) KvVM-EüM-FVM joint regulation http://www.geo-log.hu/uploads/docs/6_2009_kvvm.pdf

[9] Greenpeace: Sludge far more toxic than reported so far; Index; 2010. October 8th http://index.hu/belfold/2010/10/08/arzen_es_higany_az_iszapban/

test results from 2003, and even then there had in fact been no tests for arsenic or mercury concentrations. Regardless, the MTA statement long served as a basis for challenging the results of Greenpeace tests. **Later on however, MTA removed its October 7th statement was removed from their website**[10] Later tests conducted by MTA after the disaster—although using different methods[11]—had by and large similar results as Greenpeace tests, though a larger sample size obviously led to greater variance.

4.2. Greenpeace test results

Samples	Metal content of solutions (µg/l)						
	As	Cd	Cr	Hg	Ni	Pb	Zn
Greenpeace 2010.10.05.– decanted water (Bálint Analitika)	**218**	**3,55**	**377**	**3,18**	**167**	**79,3**	84,3
Greenpeace 2010.10.05. – filtered water (Bálint Analitika)	**250**	0,94	**104**	**1,09**	**26,5**	5,26	106
Maximum Contaminant Levels for sewage sludge[12]	**100**	**200**	**500**	**50**	**500**	**500**	**1000**
Maximum Contaminant Levels for potable water	**10**	**5**	**50**	**1**	**20**	**10**	
Contaminant (B) limits for groundwater	**10**	**5**	**500**	**1**	**20**	**10**	**200**
Intervention levels (C) of c ontamination (varies according to area sensitivity)	**20–75**	**6–10**	**100–200**	**1,5–3**	**50–100**	**40–100**	**300–1000**

Table 2: Metal content in red mud concomitant liquid (µg/l)

After the reservoir burst, Greenpeace conducted the following investigations:

2010.10.05. Sampling was directed to assess the content of the material spilled on the streets of Kolontár during the disaster. Tests were made both on more solid muddy material and the liquid flowing in the rainwater ditch.

2010.10.22. Samples were collected from drilled wells in Devecser and Kolontár, which had been washed over by the sludge. The object of the test was to determine the severity of the contamination of these wells, and publishing the result to call attention to the urgency of well

[10] The deleted website: http://mta.hu/cikkek/a-vorosiszap-szennyezes-hatasai-125707

[11] Distilled water and ammonium-acetate

[12] 28/2004. (XII. 25.) KvVM regulation for maximum water contaminant levels; ch.32 Metal production http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A0400028.KVV

decontamination. Samples from the Torna stream were used to determine the quality of its water quality 3 weeks after the contamination. Samples were also taken in Kolontár, from the remaining red mud, as well as plaster and dudarit, to test the materials used to neutralize the sludge for contamination.

2010.11.11. Tap water samples were taken in Kolontár and Ajka to test for contamination. Additionally, red mud was sampled from Basin X, and hydrochloric acid used for neutralizing was taken from a feed pipe to Basin X/a. to determine what further water pollutants may come in contact with the water system from these sources. A further sample was taken at a measuring well connected to the catchment basin so that the old reservoirs are also beneath it in terms of fluid mechanics, in order to establish whether the entire drinking water supply might be polluted.

2010.11.02–12. Analysis of dust gathered by the organization's own dust collector device, in order to test the size of airborne particles and their contents, as well as to record dust concentration data.

2011.01.26. Sampling of leachate discharge pipe, the sewer above and below the pipe, and below the acidifying station. In order to establish what is being discharged into the sewer, and what detectable change the acidification process brings. Also to determine what materials flow directly into the Torna stream, this inflow's comparison to maximum contaminant levels, and an assessment of short and long term impact.

According to Greenpeace's test results, the red mud concomitant water phase contained high levels of the metals arsenic, nickel and lead several times higher than maximum contaminant levels for soil and drinking water, as ordained by regulations 6/2009. (IV. 14.) KvVM-EüM-FVM joint regulation and 201/2001. (X. 25.) government decree, as well as the groundwater intervention levels specified in the now defunct 10/2000.(VI.2.) KöM-EüM-FVM-KHVM **joint regulation. Established and defunct limits were exceeded, in the case of chrome, mercury and nickel. Only arsenic levels were in excess of maximum sewage sludge contamination levels.**

4.3. Water testing

4.3.1. Results from MTA (KFKI, MAFI, TAKI) tests

The Government Coordination Commission and the Interior Ministry's National Directorate General for Disaster Management requested the chairman of MTA to form a committee of experts to aid the disaster management effort.[13] The expert committee was set up on the second day of the disaster,[14] led by János Szépvölgyi, director of the Material and Environmental Chemistry Institute at the Chemical Research Centre of MTA (The Hungarian Academy of Sciences). On the same day, the group travelled to the scene of the disaster. MTA associates have since taken and analyzed a large number of samples.

The results of MTA tests were published in a report.[15] The research facilities investigated the following criteria:

- alkalinity (pH)
- physical constitution, with special regard to components posing a potential health and environmental hazard
- estimates for the dispersion of these components.

They concluded that *"based on the analysis of samples taken from various locations, the alkalinity of the material spilled from the reservoir varies between pH 11-14. This indicates that the red mud is environmentally hazardous."* The evaluation of the red mud's constitution determined that *"based on our data, the spilled sludge is a heterogeneous material, its constitution varies from place to place within specific margins."* There is of course no maximum contaminant level specified for red mud, so the MTA compared its results with contaminant limits set for sewage sludge.[16] Besides the MTA and other official results, the tables below also shows results from Greenpeace tests, specifying other valid limit levels besides the ones specified by the MTA. Levels exceeding the permissible limits are highlighted in bold.

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[13] János Szépvölgyi: SOME THOUGHTS ON THE DISASTER CAUSED BY THE AJKA RED MUD SPILL http://www.matud.iif.hu/2010/12/07.htm

[14] Committee members: Attila Anton and József Szabó (MTA TAKI), Attila Demjén and Péter Sípos (MTA GKI), Péter Bíró and Lajos Vörös (MTA BLKI), János Szépvölgyi and László Kótai (MTA KK AKI) and János Podani (ELTE)

[15] A summary of test results for the Ajka red mud spill based on samples analyzed up to October 12th, 2010 http://mta.hu/data/HIREK/iszap/AKI_eredmenyek_osszefoglalasa.doc?wa=emun1021h

[16] Their EU listed code number is 20 03 06 – for agricultural use, in soil enhancement

Samples	As	Cd	Cr	Hg	Ni	Pb
MTA KK AKI 2010.10.05.	**135–144**	n.d.	**632–677**	**1,64–8,59**	**192–219**	**189–195**
MTA KK AKI 2010.10.05.	**33,4–35,7**	n.d.	**83,4–85,8**	n.d.	**64,3–73,1**	43,2–53,9
Bálint Analitika 2010.10.05.	**43,6–44,5**	2,30–2,42	**689–721**	0,54–**0,67**	**281–289**	80,9-83,2
Bálint Analitika 2010.10.05.	**27,9–32,3**	0,24–0,34	**57,6–74,5**	0,18–0,28	26,3–36,4	7,52–11,8
Greenpeace 2010.10.05. – (Bálint Analtika)	**40,8**	1,2	**191**	**0,76**	**59,5**	47,5
MÁFI 2010.10.06.	**81,6–131**	0,82–**1,44**	**360–694**	**0,61–2,83**	**143–322**	96,2–**177**
Maximum Contaminant Levels for sewage sludge	**75**	**10**	**1000**	**10**	**200**	**750**
Contaminant (B) limits for soil	**15**	**1**	**75**	**0,5**	**40**	**100**
Intervention levels (C) of contamination (varies according to area sensitivity)	**20–60**	**2–10**	**150–800**	**1–10**	**150–250**	**150–600**

Table 3: Red mud metal content (mg/kg) – Source: MTA[17]

Dry red mud has therefore been tested both by MTA and Greenpeace to contain levels of arsenic, chrome, mercury and nickel all far in excess of the levels limited by joint regulation 6/2009. (IV. 14.) KvVM-EüM-FVM[18] as Maximum Contaminant Levels for the soil. Several MTA samples tested lead concentration at approximately double the maximum soil contaminant level, and some samples contained cadmium concentrations slightly over the maximum level. The since defunct joint regulation 10/2000.(VI.2.) KöM-EüM-FVM-KHVM soil intervention level was only exceeded by arsenic concentrations in nearly every sample. These concentration levels were diminished with soil dispersion. Maximum sewage sludge contaminant levels were also only exceeded by arsenic concentrations. In comparison to the earlier regulation 10/2000, the successive regulation 6/2009 omitted the so-called action (C) levels that vary according to an area's sensitivity. We are specifying these intervention levels for comparison**.**

[17] http://mta.hu/data/HIREK/iszap/AKI_eredmenyek_osszefoglalasa.doc?wa=emun1021h

[18] http://www.complex.hu/jr/gen/hjegy_doc.cgi?docid=A0900006.KVV

Samples	Solutions' metal content (µg/l)					
	As	Cd	Cr	Hg	Ni	Pb
MTA KK AKI 2010.10.05. distilled water	k.h.a	k.h.a	k.h.a	k.h.a	**190**	**60**
Maximum Contaminant Levels for sewage sludge[19]	**100**	**200**	**500**	**50**	**500**	**500**
Maximum Contaminant Levels for drinking water	**10**	**5**	**50**	**1**	**20**	**10**
Maximum Contaminant Levels (B) for groundwater	**10**	**5**	**50**	**1**	**20**	**10**

Table 4: Red mud solutions and their metal content (µg/l) – Source: MTA[20]

Tests for distilled water soluble metal content in the red mud was carried out by MTA AKI. Concentrations of nickel and lead were several times higher than the maximum contaminant levels for groundwater allowed in joint regulation 6/2009. (IV. 14.) KvVM-EüM-FVM, and fro drinking water in government regulation 201/2001. (X. 25.), also several times more than the minimal risk levels for groundwater, and chrome, mercury and nickel concentrations occasionally in excess of intervention levels specified in the defunct joint regulation 10/2000.(VI.2.) KöM-EüM-FVM-KHVM.

Environmentally diffused red mud and sludge concomitant water pollution is difficult to measure against any limit values, given how the material mixes and disperses in the soil, rainwater and living waters, thereby diminishing in concentration. Industrial sewage sludge contaminant limits are thus hardly applicable, since they are for application under well-known and controlled circumstances. The solubility of toxic metals alters as alkalinity changes. While arsenic is more likely to enter an aqueous phase in an alkaline environment, other toxic metals are only mobilized in acidic media.

4.3.2. Test results from University of Pannonia

Water chemical testing was also carried out by a team of experts from the University of Pannonia (UP). During the first phase of the disaster, neutralizing the lye dispersed with the red mud spill was top priority, in order to save surface and subterranean waters. In cooperation with the County Occupational Safety Commission, UP associates poured plaster, and subsequently liquid fertilizer and dolomite nitrate into the polluted living waters, primarily the Torna stream and the river Marcal. In the wake of these interventions, water chemical levels are now approaching normal.

Samples tested by UP associates indicated no mobilization (water solubility) of heavy metals in alkaline solutions. Some samples contained concentrations of cadmium, copper and

[19] regulation 28/2004. (XII. 25.) KvVM on maximum contaminant levels for water pollutants and applicable rules; ch. 32.Metal production http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A0400028.KVV

[20] http://mta.hu/data/HIREK/iszap/AKI_eredmenyek_osszefoglalasa.doc?wa=emun1021h

arsenic in excess of permitted levels, but this was not brought in direct connection with the spill, considered a local contamination instead.

Experts recommend an investigation of the basin and mud of the Torna stream and the river Marcal, to assess the effect of de-alkalizing plaster on the river sediments.

4.4. Air/dust test results

Since over 1000 hectares of land were covered by the spilled red mud, the prospect of large quantities of red mud dust polluting the air became an immediate concern. The dust itself is alkaline, and contains some of the toxic elements of the sludge. Coming in contact with water inside the human body (mucous membranes, respiratory tracts, eyes), it may cause a burning, painful sensation. In time, the carbon dioxide occurring in the air will neutralize the alkali, the risk therefore diminishes in the long term.

Speculation arose about the effects of air-diffused dust following the disaster. In an open letter dated October 12th, Greenpeace and Clean Air Action Group petitioned clarification of data and increased protection for the population[21] to Minister of Interior Sándor Pintér. The NGO's highlighted the *"need for continual, coherent and concise public information, something we are presently far from attaining"*. Residents and rescue workers were handed out various types of dust mask, but residents wore these only sporadically and this was probably due to insufficient notification. Experts reported from the site that the trees and buildings in the area are covered in red dust, and that dust is regularly kicked up by rescue vehicles on dry days. In the aftermath of the disaster, frequent rains contributed to a decrease in dust emission, and alkaline surface dust was washed away or diluted by rainwater. Clean Air Action Group asked the Ministry of Agriculture and Regional Development repeatedly for information on the level of contamination, the concentrations of toxic pollutants, but the requested information didn't arrive until November.

During the first days, authorities only gave notice of PM10 (airborne particulate) concentration in the air, stating that it is within, or only in slight excess of, the maximum PM10 contaminant level. For several weeks, authorities neglected to clarify the possible presence of toxic, carcinogenic airborne substances. Maximum contaminant levels for carcinogenic airborne substances are specified in Appendix 1 of joint regulation 14/2001 (V.9.) KöM-EüM-FVM,[22] including chrome, arsenic and cadmium. If in fact the dust still contains some alkali, it causes a burning, painful sensation when contacting human mucous membranes, respiratory tracts and eyes. Greenpeace and Clean Air Action Group declared it misleading[23]

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[21] Greenpeace and Clean Air Action Group petitions Minister of Interior Sándor Pintér for clarification of data and increased protection for the population http://levego.hu/hirek/2010/10/az_adatok_tisztazasat_es_az_emberek_fokozott_vedelmet_keri_a_greenpeace_es_a_levego_mu

[22] joint regulation 14/2001 (V.9.) KöM-EüM-FVM http://www.kvvm.hu/cimg/documents/14_2001_K_M_E_M_FVM.doc

[23] Red mud: only thorough testing will lead to good decisions; October 15th, 2010. http://levego.hu/hirek/2010/10/vorosiszap_csak_alapos_meresek_utan_hozhatok_jo_dontesek

to compare the local air quality data with general airborne particulate contamination levels, while permissible limits for carcinogenic substances found in red mud are one thousand to ten thousand times lower than those for airborne particulates.

Results for testing the dust pollution's constituents were published by Greenpeace on October 13th, 2010.[24] According to the Greenpeace report, ***"the presence of fine grain PM10 dust is extremely high, and anyone in the area exposed without adequate protective equipment faces serious health hazards".*** **This statement proved to be a mild overstatement, considering that though high PM10 concentrations are a health hazard, this is the same concentration level as Budapest's air contains in nearly 80 days of each year, and in fact most of the country's large towns had 30-60 days with pollution levels in excess of limits, in the year 2010.** The report[25] also called attention to the importance of wearing dust masks: *"in the areas affected by dust pollution, it is advised to wear minimum FFP3 (also known as P3) particulate filter (or ideally, combined filter) equipped masks that have separate exhalation valves. Filters should be replaced every four hours, or in accordance to respiratory irritation and/or heavy breathing".* A later in-depth Greenpeace report however, stated[26] that ***"based on a week long sampling, airborne fine dust contaminant levels were within permissible limits".***

It was only weeks after the disaster that authorities gave public notification of toxic metal levels in airborne dust around the affected area. **According to data published weeks after the disaster,[27] though the total quantity of airborne particulates (PM10) exceeded minimal risk levels, the concentration of individual carcinogenic substances in the air did not exceed annual minimal risk levels.**

As to the question of the health risk posed by alkaline dust, no appropriate and professionally founded statements were published. According to the Greenpeace report, *"when inhaled, the alkali irritates the mucous membranes and causes intense burning, and extensive exposure may lead o serious respiratory injury."* An expert from the ÁNTSZ stated, ***"wearing the so-called ftp 2-3 protective dust mask, air pollution is no worse than in heavily dust-polluted Budapest".***[28] The expert reassured the general population, saying *„this dust is not as dangerous as we first thought, after all this wasn't a chemical plant meltdown".*

Experts from University of Pannonia modelled the gradual dehydration and dispersion of the red mud affected surface and its impact. Modelling experiments showed that inhalable airborne dust constitutes nearly one-thousandth of the red mud's total mass, which is a high ratio compared to breathable dust yields of other flowing substances and natural soils.

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[24] Greenpeace tests fine dust contamination around Devecser and suggests protective measures; 2010.10.13 http://greenpeace.hu/hirek/p1/rkezdo/i274

[25] Greenpeace results for fine dust contamination and recommended protective measures for affected residents http://greenpeace.hu/up_files/128696757420101013_porszennyezes.pdf

[26] Red mud: More tests, better results; Vienna/Budapest, November 26th 2010. http://greenpeace.hu/hirek/p1/rkezdo/i287

[27] Air tested for dust contamination: http://www.katasztrofavedelem.hu/letoltes/lakossag/porszennyezetseg_20101102.pdf

[28] Wounds rotting with alkali: We are to be lab rabbits – the game is up in Devecser; 2010.10.26. http://hetivalasz.hu/itthon/lugtol-rohado-sebek-kiserleti-nyulak-leszunk-all-a-bal-devecseren-32804

When mobilized, red mud releases a reddish, smoke-like emission which shows copious visible fine grain dust content. Airborne dust grain size distribution ranges from fine to large. The large particles may be deposited inside the respiratory system, developing a strongly alkaline fluid. This dust-developed alkaline solution is a serious health hazard, especially in case of massively inhaled red mud. The fine particles enter the alveolar sacs, resulting in yet more severe alkaline poisoning. Those entering the secured area around Kolontár and Devecser were required to wear protective clothing. Dust pollution in the Devecser area was not critical. A mobile air pollution testing station was set up in the Castle Park of Devecser, so that should airborne dust levels increase, immediate notification may be sent to Disaster Management authorities.

4.5. WHO and EU reports

4.5.1. WHO red mud report

The World Health Organization (WHO) Regional Office for Europe deployed an international delegation to Hungary between the 12th and 16th of October, to support Hungarian government in combating mid- to long term health consequences of the red sludge disaster.[29] By November 17th, the report containing the statements and suggestions of WHO had been translated to Hungarian,[30] WHO experts submitted their suggestions to the Ministry of National Resources, the Ministry of Interior's National Directorate General for Disaster Management, representatives of the Government Coordination Commission and the National Institute of Environmental Health.

The report stated that deaths and injuries were caused primarily by the red sludge's highly alkaline pH level causing chemical burns on exposed skin and eyes.[31]

The WHO alerted Hungarian authorities that red sludge cleanup and rescue operations should be manned by trained emergency crews. The report also calls for a surveillance system and its maintenance in order to ensure that rescue workers are supplied with appropriate protective gear and clothing, and that workers really use the protective equipment.

The international report highlights that the area is of special health and environmental concern; its soil and air must be monitored continuously, as well as the health of relocated residents and rescue crews.[32] Importance of air testing and especially airborne particulate concentration was also emphasized. The report calls for the investigation of all significant increases in air pollution, and the eradication of causes thereof. In order to detect and prevent further pollution, and environmental pollution on a longer term, tests of air quality and the chemical constitution of soil and water must continue in the future. WHO experts suggested further testing points to be set up in affected settlement centres and near affected real estate. The WHO stated that an

[29] WHO red mud report, Nov.17th 2010 http://www.greenfo.hu/hirek/hirek_item.php?hir=25994/

[30] http://www.greenfo.hu/upload/WHO%20v%F6r%F6siszap%20jelent%E9s.doc

[31] WHO report on red mud disaster; 2010. 11. 18. http://www.mixonline.hu/Cikk.aspx?id=44847

[32] Sludge hazard: WHO report, November 16th 2010. http://www.stop.hu/articles/article.php?id=776244

urgent analysis of the remaining sludge still in the reservoir is of crucial importance, as well as a study of the geohydrologic stratification beneath the reservoirs. They also suggest investigations of the relocated red sludge and the reservoir used for storing contaminated soil.

Further suggestions include *"an investigation of possible mid to long term health effects of contacting locally produced food and water possibly contaminated by direct contact with red sludge"*. WHO experts stress that though drinking water quality remained stable in the disaster's aftermath, the general population must be cautioned that wells should be used for irrigation only, and water from private wells should only be imbibed after appropriate testing.

They also suggested the setting up of a local *"regular screening network for general health, reports and investigation of unexpected symptoms, with special attention to sensitive demographic groups"*. Residents must be appropriately notified of the programme. **A suggestion was made to develop the analytic capacity and equipment of ÁNTSZ to enable better reaction in similar future events.**

Evaluating the remediation, the WHO report states that contamination of the river Danube was successfully averted. A suggestion was made to drain the surface water from red sludge reservoirs in order to decrease pressure as well as to enable further dehydration of the red sludge.

A suggestion was made for assessing the environmental risk factor of similar facilities along the river Danube. The report proposes an investigation of various industrial facilities and landfills for their resistance to extreme weather conditions, and updating emergency plans with the participation of all parties concerned.

4.5.2. EU experts' red sludge report

On October 7th, the government of Hungary asked for help from the European Commission Monitoring and Information Centre (MIC), requesting the deployment of a group of experts to Hungary. The group of experts in minimising and countering environmental damage arrived from France, Belgium, Sweden, Austria and Germany to the scene of the disaster on October 11th, appointed to make suggestions for the effective management of damage caused by the red sludge.

Following an investigation in Kolontár, Devecser and the ruptured reservoir, the EU experts compiled a report by October 17th[33] and submitted it to the chief director of National Directorate General for Disaster Management. The EU experts had previously conferred with experts of the MTA, and received all test results from Hungarian authorities, as well as consulting with experts making tests on location.[34]

The EU experts, much like the WHO experts, called attention to the importance of further tests and investigation, which are indispensable for long term action. The report states that drinking water quality is safe for human consumption. The EU experts called Hungarian authorities' attention to ensure by all means that the water leaking out of the reservoirs should not come in contact with living waters.

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[33] RED MUD – EU experts' report due tomorrow, 2010. 10. 16 http://www.haon.hu/hirek/IM%3AALL%3Anews_special-hungary/cikk/vorosiszap---holnapra-elkeszul-az-eu-szakertk-jelentese/cn/haon-news-charlotteInform-20101016-0904180680

[34] EU experts' preliminary report (statement); October 17th 2010 http://vorosiszap.bm.hu/?p=661

4.6. Information on the presence of further pollutants

According to MAL. Co. Ltd.'s environmental permit, valid until February 2011,[35] the company is licensed to conduct the following activities at its Ajka facility (8400 Ajka-Gyártelep, 598 hrsz.) to the following capacities:

- Aluminium oxide production 300.000 tonnes/year
- Gallium production 5.5 tonnes/year
- Zeolite production 30.000 tonnes/year
- Aluminium alloy 21.000 tonnes/year
- Aluminium slag processing 3.500 tonnes/year

From an environmental point of view, the production of gallium is of greatest risk, because the process involves the use of highly toxic mercury. According to the permit:

- *During aluminium oxide production, pollutants are removed from the alkaline residue after cooling, sedimentation and applying centrifugal force. The alkaline residue is used to produce Na-Ga-amalgam, in mercury cathode electrolytic cells.*
- *During the amalgam separation process, hot water is applied to produce a Na-gallate solution. The solution is evaporated, filtered, and cemented to yield raw Ga. The raw metal is heat treated, acidified, crystallized and electrorefined to yield high purity metal.*
- *The alkali exiting the cells is settled, its mercury content removed and united with the mercury regained from amalgam separation. The alkali is reintegrated into the aluminium oxide production cycle.*

Gallium production started at the Ajka plant in 1959. The gallium works are located on the Eastern edge of the t-1 aluminium oxide plant. According to the license, *"Air pollutants released during gallium processing in the manufacture of the refined product are emitted into the environment without purification"*. Following the 2010 accident, the preliminary study for the new permit[36] also states that 100% of the mercury emissions are due to gallium production, totalling around 0,004 kg/h. Earlier studies have noted the T-1 plant area's gallium works emitting Hg pollutant, *"while PAH contamination was found by industrial rail track no. VII. The necessary*

[35] CENTRAL TRANSDANUBIAN FOR ENVIRONMENTAL ISSUES, NATURE CONSERVATION AND WATER MANAGEMENT Subject: MAL. Co. Ltd. environmental permit http://kdtktvf.zoldhatosag.hu/upload/File/10897-05-2(1).doc

[36] MAL. Co. Ltd. Ajka Plant (8401 Ajka-Gyártelep, Hrsz. 598.) Environmental Permit – Full Environmental Review; November 2010; Székesfehérvár http://kdtktvf.zoldhatosag.hu/upload/File/I_kotet_Tanulmany.pdf

remediation was performed in the year 2000, removing 7.2 m^3 and 9.0 m^3 of soil contaminated with mercury and PAH, respectively".

The technology reprocesses the mercury both from amalgam separation and alkali sedimentation. According to the study, *"purified mercury is held in the mercury container, then fed back into the electrolytic cells. Fresh mercury making up for the amount lost in technology is also fed into the mercury container. Alkali separated during mercury purification is added to the sedimented alkali exiting the electrolytic cells, and are reused in aluminium oxide production*". These words make it obviously clear that there is a constant loss of mercury, and that reprocessed alkali are also contaminated with mercury. **Mercury emission is included in the plant's environmental permit, but it's also possible that some of the mercury used finds its way into the red sludge.**

ÁNTSZ published a document entitled, **"What should we know about red sludge?"** which makes no mention of possible mercury content. The test results produced by Greenpeace after the disaster found 0.76 mg/kg mercury dry mass concentrations in a Kolontár ditch, while associates of the Geological Institute of Hungary (MÁFI) analyzed 10 sludge samples in the Kolontár and Devecser area, also on October 6th 2010, and found mercury concentrations of 0.61-2.83 mg/kg.[37] **These levels exceed the maximum mercury limits of 0.5 mg/kg for soil, but are under the 10 mg/kg limit set for sewage sludge.**

4.7. Evaluating the test results

4.7.1. Pollution of the area's land and water

Conflicting statements, and especially that of environmental state secretary Zoltán Illés stating that unless the pollutant can be caught in the river Marcal but reaches the river Rába, "then we'd all better kneel and pray!",[38] filled local residents with considerable angst. Visiting the site, the state secretary alluded to the possible carcinogenicity of inhaled red sludge dust. On top of that, on the second day of the disaster, Zoltán Illés also declared that "the next difficult task is collecting and disposing the mildly radioactive contamination". Subsequently, all experts refuted that radioactivity emanating from the red sludge might pose even the slightest hazard to human health. Despite this fact, local residents were mostly worried about radioactive pollution during the first few days of the disaster.

Illés Zoltán stated that[39] *"the areas affected are unsuitable for any useful agricultural activity, and will bear no plants fit for human or animal consumption for fifteen or even twenty years, and we should thereby experiment with chemicals or bacteria that might neutralize the highly alkaline, mildly radioactive red sludge*". In reaction to the first statement, local residents declared that after the sludge is cleared, soil must be replaced up to a meter in depth, for fear of the area becoming

[37] A summary of tests related to the Ajka red mud spill conducted on October 12th 2010 http://www.geol.hu/index.php?option=com_content&view=article&id=72:voeroesiszap-mta-vizsgalatok&catid=30:spektrumkoenyvtar

[38] Illés: We'd all better kneel and pray! MTI; October 5th, 2010 http://index.hu/belfold/2010/10/05/illes_mindenki_terdre_imahoz/

[39] www.greenfo.hu/hirek/hirek_item.php

uninhabitable for up to 30-40 years.[40] In comparison, test results both foreign and domestic prove that even cash crops may be grown on neutralized red sludge, or soil containing such sludge, on the condition that toxic pollutants are within minimal soil risk levels.

Later, on November 24th, ministerial director **Csaba Szabó** stated[41] that the red sludge had covered 1017 hectares of topsoil, and caused contamination below the level anticipated. Even in the very first days of the disaster, MTA chief secretary Tamás Németh stated that topsoil replacement or special use are possibilities for the nearly 800 hectares of sludge contaminated land.[42] According to the MTA, once the alkalinity is neutralized, *"the area will remain unsuitable for farming, not even after the contamination is removed. These areas will be exempted from farming and may be used instead for energy crop production or possibly forestry."* **Subsequently, in light of new test results from MTA following the disaster, he stressed that toxic metal contamination levels are within maximum limits for sewage sludge.**

ÁNTSZ issued a statement declaring the area's water potable, based on 120 tests. Greenpeace found no pollutants in the drinking water catchment, though one Devecser well was found to contain 4200 micrograms of arsenic per litre, as opposed to the permissible 10.[43] Local provider Transdanubian Regional Waterworks gains regional drinking water from deep karst basins. Drinking water contamination risk is thereby minimal, though drilled wells are prone to contamination.

Tests conducted since the disaster have shown arsenic concentrations in the Torna stream, the river Marcal and inland waters exceeding groundwater and drinking water risk levels, often significantly. **Red sludge contained chrome, lead and nickel contaminants exceeding now defunct intervention levels, as well as maximum contaminant levels for groundwater and drinking water.**

Dry red sludge arsenic concentrations tested by both MTA and Greenpeace were found to significantly exceed maximum contaminant levels for soil and sewage sludge. According to tests, these extreme arsenic levels are only present in wells, which after due notification are hopefully only used for irrigation. According to available test results, the contamination has stopped spreading, the drinking water catchment is unaffected; no red sludge pollution is present in drinking waters. Further effects of high arsenic concentrations however may present further problems.

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[40] http://www.origo.hu/itthon/20101005-megtalaltak-a-vorosiszapkatasztrofa-negyedik-halottjat.html

[41] www.hirado.hu/Hirek/2010/11/24/15/Jo_hir_A_vorosiszappal_elontott_foldeken_a_talaj.aspx

[42] Sludge disaster: topsoil replacement or special land use in view 2010. 10. 7. http://vg.hu/vallalatok/mezogazdasag/iszapkatasztrofa-talajcsere-vagy-a-fold-specialis-hasznositasa-johet-szoba-329782

[43] Red mud: catastrophic test results, 2010.11.29. http://hetivalasz.hu/itthon/vorosiszap-katasztrofalis-meresi-eredmenyek-33674/

4.7.2. Alkalinity

Several days were to pass before it was determined that the main hazard posed by red sludge is its alkalinity.[44] The media featured many conflicting statements regarding alkalinity and its risks. Initial reports stated that hosing off the red sludge constitutes sufficient protection, are partly correct, as washing is the most effective way to combat alkali, however, due to the extent of the contamination, hosing was inadequate protection in cases where skin had become exposed to the alkaline liquid at length.

According to the ÁNTSZ publication brought out on the second day of the disaster, the sludge awaiting containment was pH 12-13, and an attached chart cited the sludge pH at 11.8, which is lower than the actually tested pH 13.[45]

Media repeatedly stated that the Ajka red sludge is not significantly alkaline. Following the disaster, Clean Air Action Group's call for international aid was met with puzzled responses whereby the pH 13 was considered an error, in light of far lower results. For example, the Aluminium Association of the USA opined that after 5-7 "washes", the sludge couldn't possibly be so alkaline. In an interview on Hungarian news portal Index, chemical engineer and aluminium oxide technician György Bánvölgyi stated[46] that pH 12.8 is a maximum contaminant level for red sludge in developed countries. For example, red sludge in the VAW Stade-plant is pH 12.1.[47] However, after the disaster, most published test results reported a maximal pH level of 13. This pH value was, however, measured in diluted concomitant liquid following the heavy rainfall. With a 700.000-900.000 m^3 spill, dilution takes considerable time to set in. **It therefore appears that the Ajka red sludge and the concomitant reddish liquid was more alkaline than average.**

4.7.3. Air pollution

Authorities were slow to clarify the possible presence of toxic, carcinogenic substances in red sludge related air pollution. In case it contains alkali, dust may burn and irritate mucous membranes, respiratory tracts, and eyes.

Environmental organizations deemed it misleading to compare the local air quality data with general airborne particulate contamination levels, while permissible limits for carcinogenic substances found in red sludge are one thousand to ten thousand times lower than those for airborne particulates. Local PM10 air pollution exceeded health limits repeatedly, but the pollution arrived partly from abroad, and affected the entire country. Several weeks after the disaster, disaster management authorities published its detailed test results for dust pollution. According to detailed analysis, these rigorous limit values were not exceeded by PM10 concentrations containing red sludge particles. However, no information was published regarding alkalinity of the dust pollution. Despite the lack of appropriate notification and conflicting information, authorities recommended dust masks to be worn to avoid alkaline risk.

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[44] Several experts made similar statements on the second day of the disaster: **Olga Kálmán and György Bánvölgyi converse, Egyenes beszéd, 2010.10.05**. http://www.youtube.com/watch?v=XUPkndMtSSA

[45] The pH scale is logarythmic, thereby a pH 9 is tenfold the alkalinity of a pH 8

[46] http://index.hu/belfold/2010/10/13/vorosiszap-ph/

[47] www.aos-stade.de

4.7.4. Confusing the population

Uncertainty and fear on part of residents was consequential from an extended absence of reassuring or relevant information regarding the extent and effects of the contamination. Statements and information regarding the contamination and its effects were often contradictory to one another:

- On October 4-5th, Ministry of Interior's National Directorate General for Disaster Management website declared the *"sludge contains heavy metals, including lead, and is mildly radioactive, inhaling the dust may cause lung cancer"*. This notification was pulled from the website on October 5th, but had been quoted in domestic and international media.

- On October 5th, ÁNTSZ stated there is a low concentration of toxic contaminants in the sludge. A chart was provided demonstrating that toxic metal concentrations were lower than maximum soil contaminant levels.

- On October 7th, the MTA declared the sludge contains no toxic metals, or heavy metals soluble from the sludge to excess of minimal risk levels. The academy later pulled the statement from their website.

- On October 8th, Greenpeace published results from tests conducted October 6th, showing arsenic concentrations two magnitudes in excess of those published by ÁNTSZ. Test samples from a Kolontár ditch contained arsenic and other toxic metals significantly exceeding soil, groundwater and drinking water limits.

- In the days after October 8th, MTA challenged Greenpeace test results, but this was clearly based on results from 2003, and MTA had in fact neglected to test arsenic and mercury concentrations. Meanwhile, samples had been taken on October 5th by MTA AKI and October 6th by MÁFI.

- On October 13th, MTA published its results from tests after the disaster.[48] The data largely matched earlier results published by Greenpeace, and in some cases found even higher concentrations. However, MTA compared its results with maximum sewage sludge contaminant levels, which limits were not exceeded, or only slightly.

Residents continue to face confusion due primarily to misleading and inaccurate information provided by the authorities.

[48] http://mta.hu/mta_hirei/tajekoztato-a-kolontari-vorosiszap-tarozo-kornyezeteben-vegzett-vizsgalatokrol-125761/

4.7.5. Water pollution during the emergency

Environmental organizations were informed by the media[49] of alkaline, heavy metal contaminated water being drained from the ruptured Basin X and the neighbouring reservoirs, into the Torna stream, following acidification. **Environmental organizations and representatives of green party Lehet Más a Politika (LMP) observed on site that 3 pipes were feeding red liquid into the plant's water drain, the water was subsequently acidified before reaching the Torna stream. Environmentalists had documented this in November-December 2010 and late January, 2011.** During this time, EU experts called on Hungarian authorities to prevent the water leaking out of the reservoirs from contacting living water by any means.

In November 2010, Clean Air Action Group turned to the Central Transdanubian Inspectorate for Environmental issues, Nature Conservation and Water Management, referring to Act 2004 XXIX. 141-143.§ to request the investigation of the contamination reported in the cited news article, as per regulation 27/2005. (XII. 6.) KvVM, and prevent further ecological damage. In their reply on January 2011, the Inspectorate stated they are monitoring all emissions and there is no cause to fear further contamination. They also stated that *"the incident caused by the rupture of Basin X entailed a fine for activities ruled out by the environmental permit, and an additional waste mismanagement trial is currently underway".*

Authorities reported that due to the rupture of Basin X, the leachates previously deposited therein, as well as alkaline water preventively drained from reservoir IX, will be fed into the flow beside the reservoir, and following acidification into the Torna stream. According to Greenpeace results published February 8th, 2011, samples of the drainage fed into the plant's drain contained 1.300 µg/l arsenic, and 3.950 µg/l molybdenum,[50] both significantly exceeding the maximum sewage sludge contaminant level.[51] In reaction to Greenpeace results, Disaster Management replied on February 9th that nothing is being drained from Basin X/a, the alkaline water is being recovered. The drain pipes in question drained water from reservoir IX, as well as the leachates of other reservoirs that were formerly drained into Basin X. Disaster Management also declared that water fed into the Torna stream complied to regulations, but opted to lower pollution even further in the future. Several residents however informed NGO's and representatives of LMP, alleging that pollutants from Basin X/a had been fed into the Torna stream.

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[49] http://hvg.hu/itthon/20101107_elkeszult_kolontari_vedogat *"Mintegy három méter magasságban védőtöltéssel vették körbe az ajkai timföldgyár megsérült X-es számú zagytározójának kiszakadt részét, hogy meggátolják a szennyeződés további kiömlését, és vasárnap reggelre elkészült az a lecsapoló árok is, amellyel az erősen lúgos vizet egy semlegesítő helyre vezetik."*

[50] http://greenpeace.hu/hirek/p1/rkezdo/i302

[51] regulation 28/2004. (XII. 25.) KvVM on maximum contaminant levels for water pollutants and applicable rules; ch. 32.Metal production http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A0400028.KVV

Summary

In light of known pollution data, it is understood that the loss of life and injuries were caused not only by the flooding but by the alkalinity of the liquid flowing with the red sludge. Besides high alkalinity, certain heavy metals may mildly contaminate soil, groundwater and water. There is no information to determine whether the plaster and acid used to treat the spillage has led to further ecological damage.

Red sludge contained contaminations of chrome, mercury, lead and nickel that several times exceeded maximum levels for soil and drinking water, and occasionally exceeded now defunct intervention levels. Arsenic concentrations for dry red sludge tested by MTA and Greenpeace showed contamination in excess of soil and sewage sludge levels. According to tests by Greenpeace, arsenic concentration in samples of Kolontár ditch water measured 0.25 mg/l, which is 25 times the amount permissible in drinking water or groundwater, and 2.5 times the plant's maximum sewage sludge contamination level. High arsenic concentration mostly affected drilled wells. According to existing test results, the contamination has not spread further, and the drinking water catchment is unaffected. High arsenic concentration may cause further problems in the long term.

Besides arsenic, red sludge also contained a significantly high concentration of mercury. This is due to gallium production processes, a known fact and documented in the plant's environmental permit. Regardless, the mercury content of red sludge was not mentioned in the ÁNTSZ publication "What should we know about red sludge".

During the first days of the disaster, authorities cited test results several decades old to back up claims that red sludge poses no serious health or environmental hazard. During the first week of rescue operations, residents received no factual notification of possible radioactive contamination, or the health risks of airborne dust contamination. Affected residents were not informed of long term environmental impact or farming related consequences until February, 2011. Authorities communicated conflicting and often unfounded allegations throughout the entire remediation process.

The very first MTA results clarified what for years had been unclear for environmental authorities: that "analysis of samples taken at various locations indicate the substance spilled from the reservoir has a pH level that varies between 11-14. Therefore the red sludge classifies as an environmentally hazardous substance."

That results diverge from earlier years' can be partly due to the fact that the aluminium oxide plant had in recent years switched from domestic bauxite to Bosnian and Montenegrin bauxite sources.[52] The imported bauxite may differ slightly from domestic bauxite. However, this does not explain high arsenic concentrations, given that bauxite is not characterized by high arsenic content. Another possible explanation for divergent results is the fact that red sludge was spilled over a considerable area, and therefore is sure to be of heterogeneous constitution.

[52] http://index.hu/ gazdasag/magyar/2010/10/07/kik_allnak_az_iszapkatasztrofa_mogott/

Recommendations

- In order to investigate long term environmental and health impact, and to lower risk —as advised by WHO and EU expert groups—extensive, continuous and prolonged monitoring is necessary.

- Further testing must clarify the reason for the red sludge's unusually high arsenic content.

- The population must be provided scientifically verified information about the contaminated soil's future use for food and crop production.

- Legislation must be passed declaring maximum contamination levels for soil, groundwater, and surface waters, in accordance with various soil and water utilization forms. Presently there are only standards that are guidelines of a non-binding nature, and the ambivalence of relevant comparison levels leads to uncertainty in government communication as well as rescue operations.

"Thanks for the pollution"

5. Legislation

5.1. Overview of legislation in Europe and Hungary

5.1.1. The adoption and implementation of legislation in the light of the environmental licenses of MAL Ltd.

The legal foundation for MAL Co. Ltd. to engage in the activities it took over and was licensed to carry out according to the privatization contract – such as the production of alumina and gallium, as well as red mud waste disposal – was the environmental operating license no. 30.010-120/98. and its continued modifications. According to the terms of the license, the company was authorised to performing the operations referred to above until 31 December 2005. The present legal analysis concerns the treatment and disposal of red mud as a manufacturing waste product, thus the other manufacturing activities are not analyzed.

The relevant legislation in force at the time when the license was issued concerned, firstly, the classification of the waste, secondly, on the basis of that classification, the regulation of the landfill as a built structure, and thirdly, performing the activity concerned.

a) The classification of red mud as waste

The issue of when and how the classification of red mud as a waste (product) was regulated is important with respect to the activity under examination. According to Government Decree no. 102/1996 on hazardous waste substances and their treatment, in force until 31/12/2001, all waste shall be classified hazardous that is characterised by qualities defined as hazardous by the decree, such as caustic, corrosive, mutagenic, irritant and oxidising. For the sake of accuracy, Annex 2 of the decree contains a list of hazardous wastes, specifying that red mud is a grade 2 hazardous waste, under the code number V31608.

It is an important rule that the Authority issues the license for waste management based on the documentation and declaration submitted by the applicant focusing on the issue, that is, on the waste classification carried out by the applicant.

Starting with 01. 01. 2002, equally applied to ongoing proceedings, hazardous waste-related activities are regulated by Government decree 98/2001. According to the Decree, in a similar vein as under the regulation referred to above, materials shall be considered hazardous waste if they are either designated as such by a separate piece of legislation, or, in case they are not included in the list, if they have some particular hazardous characteristic. **Authorising hazardous waste-related activities including depositing hazardous waste require meeting more stringent criteria and the participation of more dedicated bodies with obligations of regular inspections than activities regarding non-hazardous waste. Furthermore, hazardous waste may only be deposited in hazardous waste disposal sites. The licensed activities must be reviewed every 3 years, including deliberations regarding modifications where appropriate, e.g. based on the requirement of using the best available technology in the field of waste management.**

The specifications of the Government decree are partially compatible with Directive 91/689/EEC. This Directive was replaced by Directive 2008/98/EC on Waste, in effect from 12. 12. 2010., which tightened or clarified the specifications of the earlier Directive on a number of accounts. According to the Directive, Member States may declare waste classified as hazardous in the EU list of hazardous waste as non hazardous, pr the other way round, provided the proper procedure is followed. However, the Directive states the general prohibition that:

(Article 7.4) The reclassification of hazardous waste as non-hazardous waste may not be achieved by diluting or mixing the waste with the aim of lowering the initial concentrations of hazardous substances to a level below the thresholds for defining waste as hazardous.

Article 34 of the Directive expressly obliges Member States to ensure that hazardous waste-related activities are subject to regular inspections:

(Article 34.1) Establishments or undertakings which carry out waste treatment operations, establishments or undertakings which collect or transport waste on a professional basis, brokers and dealers, and establishments or undertakings which produce hazardous waste shall be subject to appropriate periodic inspections by the competent authorities.

Member States are obliged to comply with EU Directive until 12. 12. 2010. This did not happen in Hungarian law.

MAL Co. Ltd. was granted permission to deposit red mud in reservoir 10 in 2004, through a modification applied to the operating license described above. By this time, however, it was Directive 16/2001. of the Ministry of the Environment, based on Government decree 98/2001, that was in force. This Directive contains the list of wastes that has been in force ever since. Unlike the earlier definition cited above, the new list, has a dedicated indication for red mud (among others), with an asterisk indicating hazardous waste:

01 03 07* other waste containing hazardous substances extracted through physical or chemical processing of metalliferous minerals

01 03 09 red mud from alumina production, different from 01 03 07

The directive containing the waste list complies with the Commission Decisions 2000/532/EC, 2001/118/EC and 2001/119/EC.

According to the definition of the waste list quoted above, however, the red mud resulting form alumina production, can in fact be hazardous as, depending on the technology used to extract the mineral raw materials and on the treatment the residue was subjected to, the waste to be treated may contain hazardous substances in concentrations which amount to having hazardous characteristics according to both Decision 2000/532/EC and Directive 16/2001 of the Ministry of the Environment.

However, the classification of the waste is not only a compulsory requirement at a given static moment, i.e. at the time of licensing, but it an act to be repeated periodically, since the waste disposed and its properties change depending on its chemical constituents and the method of treatment. It is not assumed that this autonomy is abused by applicants; nevertheless, it would be justified to require the Authority to carry out regular, independent testing on the question of whether the waste designated in the license is actually the same as the waste treated, and further to determine whether the current state and properties of the waste designated in the license meet the hazardous characteristics as a result of depositing and the passage of time. Furthermore, there is need for creating the appropriate legal environment in compliance with the regulations set forth in Directive 2008/98/EC, along with the implementation of the Directive into national law.

b) Environmental regulations governing waste disposal

- The construction of reservoir basin 10 for red mud disposal was finished in 2001, and the company was granted permission for disposing waste in 2004. The regulation to be applied was regulation 22/2001. (X. 10.) KöM on the rules and particular conditions on waste disposal and the closing down and post monitoring of waste disposal sites, in force from 2001. 10. 18. until 2006. 04. 12. Concerning the existing disposal areas, the ministry regulation called for mandatory supervision base on which a decision can be made whether the dump site conforms to the new regulations or can be modified conforming to regulations, and if not, than a decision has to be made to close it down. According to the regulation, all of the existing waste disposal facilities need to initiate inspection until 1 January 2003 at the inspectorate, and have to comply with the new regulations until 1 September 2009. Interestingly and unfortunately, this regulation does not cover the case at hand.

The objective of the regulation is compliance with DIRECTIVE 1999/31/EC and the implementation of EU legislation in Hungarian law. The directive formulates the list of waste disposal facilities excluded from its scope, e.g. for the reason that they fall under the scope of other regulations or because the disposed waste is not or hazardous or only to a limited extent. Such exceptions relevant for our case include the following as per Article 3:

ARTICLE 3, Section 2. Without prejudice to existing Community legislation, the following shall be excluded from the scope of this Directive:

- the deposit of unpolluted soil or of non-hazardous inert waste resulting from prospecting and extraction, treatment, and storage of mineral resources as well as from the operation of quarries.

Based on the provision quoted from the directive, red sludge is not excluded from the Scope of the directive, thus falls into its scope, —it is neither unpolluted soil or inert waste.

However, the regulation 22/2001. KöM. does not govern facilities under its scope in line with the definition of the directive. According to the regulation:

Article 1, Section (2): A, the following shall be excluded from the scope of this regulation:

d) the deposit of unpolluted materials or of non-hazardous inert waste resulting from prospecting and extraction, treatment, and storage of mineral resources as well as from the production technology related to mining operations.

Since in the given case, red mud was classified by the authority as non hazardous waste, and as waste resulting from the extraction of mineral raw materials, it does not fall under the scope of the regulation.

Regulation 22/2001. KöM does not comply with the provisions of the European directive regarding waste—more accurately, mining waste—not falling under its scope, and thus the regulations mistakenly failed to govern red mud landfills for disposal of red mud classified as non hazardous.

The same exclusion is contained within regulation 20/2006. KvVM. that has entered into force since then. A legitimate explanation is that these kinds of waste should be managed and regulated separately based on the EU directive on the treatment and disposal of mining waste adopted later on. This separate regulatory area was taken over by Hungarian law in 2008 according to the regulation to be analysed later on.

c) Regulation on landfills as built structures:

Directive 1999/31/EK and its appendices contain detailed provisions on the placements, technical criteria, environmental security and regular inspection of similar facilities. Due to a faulty implementation of the directive, the disposal of mining waste classified as non hazardous in international law and on the design of the built structure was not covered by special rules, only by the general construction rules.

The landfill as a built structure fell under the scope of regulation 12/1986. ÉVM in procedures that started before 1 January 1998, whereas they fell under the scope of regulation 46/1997. KTM in procedures that started after. The construction of basin 10 was granted permission in 1993, and its construction was finished in 2001. In the context of the legislation in force at the time of both the permission granting and the takeover, the two regulations above each use the rule of general scope. Thus every activity of construction and every built structure fall under the scope of the regulations except for the ones specifically specified within it. **The exceptions do not include waste disposal sites and facilities, and thus, they fall under the scope of construction permits according to the general rules, and the responsible authority is the general construction authority. Because the construction permit had to be assessed with the participation of the environmental inspectorate until November 2005. Following this state, the participation of the inspectorate is not required in the case of activities linked to environmental or integrated environmental permit as these permits specify the conditions falling under their scope, making duplication unjustified.**

Besides the procedure of permission, the construction authority keeps its important role concerning inspection obligation. At the time when the structure is first put to use, the authority inspects whether the structure was built according to the terms of the permit and whether it otherwise conform to the function intended. After this, the authority checks for stability and the obligation for proper maintenance. This post inspection obligation is defined by 47.§ (2) of the Act LXXVIII. of 1997 on the Built Environment. Under the legislation referred to, the authority must act and although for the restructuring and refurbishing the built structure if in its present state it poses any risk.

d) The fulfilment of the obligation for proper maintenance and, as well as the revision, restructuring, refurbishing, restoration or deconstruction of the built structure if its condition poses any risk to life or health, public security or that of material assets.

In the case at hand, the construction authority under obligation to monitor the condition of basin X would have had an important role to play. Construction authorities mistakenly took the position that did not have competence. This circumstance is clearly an anomaly of public administration, that will be eliminated by a modification of construction law since passed. Nevertheless, the obligation for post inspection will only be effective if it is carried out regularly by the authority. In any case, it is justified to make the act more precise, and to make it mandatory to regularly check buildings causing potential risk.

5.1.2. The problem of the hazardous character of red mud waste

Investigating the permissions, it can be declared that MAL CO. Ltd. had permission for the following substances under EWC classification.

01 03 09 red mud (700.000 tons / year)

06 05 03 sewage sludge (sludge generated during the neutralization of caustic soda content)

10 01 01 slags from power plants

10 01 02 coal fly ash

06 01 01* Sulphuric acid and sulphurous acid

06 01 06* hydrochloric acid

11 01 06* acids not specified otherwise

06 02 04* sodium and potassium hydroxide

11 01 07* bases used for pickling

11 01 09* sludges and filter cakes containing hazardous substances

11 01 10 sludges and filter cakes different from the 11 01 09*

On 30 March 2010, the inspectorate modified point 9.01 of the Permit under case no. 7613/2010-es, registry no. 29357/2010. Thus metallic oxides (EWC code 06 03 16) different from 06 03 15* came to be included in the scope.

This statement is important on two scores. Firstly, because **pH value of red mud exceeded 11.5 at the time of the accident, clearly making it hazardous under the EU directive.** Otherwise the hazardous and non hazardous substance enumerated, altogether that the company constantly receive permission for (with modifications) could have played a part in the severity of the accident. Thus it should be investigated how much this practice, considering the technology, influenced the material and/or the red mud deposited in the reservoir.

In addition, it has to be investigated if the reservoir basin only contained the material as per the permission. The documentation and the permission keep referring to the red mud as non hazardous substance. **Though Hungarian regulations treated red mud as hazardous material before 1 January 2002, later it could be classified non hazardous depending on the technology used. Here, the omission of the legislation can be identified.** Material that is classified as hazardous by the Act XLIII. on Waste Management of 2000 ("all waste shall be classified hazardous that is characterised by one ore more qualities defined in Annex 2, or contains such substances or components, posing a risk to health or the environment due to its origin, composition or concentration.") The appendix referred to classifies irritating and caustic materials (categories H4 and H8 respectively) based on this definition. Alkaline substances above pH value 9 also belong here.

Classifying red mud as non hazardous was initiated by the licensee in 2003. At this point, the inspectorate could have used the opportunity to classify the substance in the deposit as hazardous. However, due to the fact that the classification procedure was prolonged, a change in the law took place. As a consequence of the modification in force from 4 December 2003, the obligation on classification of the waste was transferred on its owner ("ART. 4, section 1: the obligation on classification of the waste in terms of its hazardousness is borne by its producer, and if the latter could not be located, by the proprietor of the waste with notice being taken of the provisions of separate legislation.")

However, the permit prescribes the waste proprietor to keep up to date registry documentation on the waste and send a summary of it yearly to the authority (quarterly in the case of hazardous waste). It also specifies that the authority should be notified of any serious change concerning the waste. The fact of becoming hazardous is clearly a significant change. The omission on the part of the licensee is obvious – due to failing to fulfil the obligation to maintain constant registry documentation and/or the obligation to report changes.

5.2. The licenses of MAL Co. Ltd. in the context of the Mining Directive, IPPC and BAT regulations and Seveso II

The activities of the company fall under the scope of government regulation 193/2001 on the use of the environment, which came into force on 30. 10. 2001. According to the interim provisions of the decree, facilities existing when it comes into force have to be obliged to be subjected to total revision by the authority with a deadline of 1 January 2004. Based on this obligation, the existing facilities must obtain an integrated environmental permit to carry out

these activities. The termination of the original license and the obligation of inspection made the company request an integrated environmental permit which it in fact received.

The concluding provisions of the decree say it "includes regulation compatible with Regulation 96/61/EC (IPPC)". The Regulation referred to specifies a separate reference to landfills indicated in points 5.1 and 5.4 in terms of the rules of their technological compliance:

Without prejudice to the provisions of this directive, the technological requirements concerning landfills falling under the scope of points 5.1 and 5.4 of Appendix I. shall be defined by the council; acting on the basis of the recommendation of the council, according to the procedure defined in the Contract.

The quoted Council regulation is Regulation 2003/33/EC, containing detailed regulation on the technical and compliance parameters of all kinds of landfills, as well as the obligation to provide regular and independent tests on the waste accepted, and the procedure of classification. The government decree on the integrated environmental permit does not contain this reference. On the other hand, the Council Regulation itself was adopted in Hungarian law, in the form of regulation 20/2006 KvVM cited above, which, however, due to the characteristic rules on entering into force does not cover the red mud disposal facility under investigation. For a specific situation developed to the effect that the landfill granted permission based on a Government Decree and provided operating permit on the basis of interim rules was not covered by an important regulatory item, the Council regulation. Yearly independent testing of the wast continuously deposited in the landfill could have shown that the west concerned has hazardous features owing to its treatment, its disposal or external conditions, and consequently its classification is not valid.

The practice of the inspection by the inspectorate raises further questions as well. That is, the indicative data provided in the permit regarding the pH value of the solidified waste material indicate that specimen 530/01 had pH value of 11,8, whereas that of 531/01 was 11,3. Though the data were merely indicative, the Inspectorate nevertheless clearly learned that based on its pH value, the red mud should have been classified hazardous already at the time of granting the permit. Based on the data, the significant difference or conflict between the tested data and the contents of the documentation should have been clarified by the inspectorate before granting the permit itself.

In the course of carrying out IPPC inspections, the authority has the right to check in terms of any of the data or aspects featured in the permit. True, this is not an obligation. only an opportunity. But it is beyond a doubt that the authority would have had to clarify the contradiction it learned from the indicative data.

Furthermore, the role of the concerned district mining directorate also needs to be investigated regarding the concerns raised by the treatment of the red mud waste. For the scope of ministry regulation 14/2008. (IV.3.) GKM on the treatment of mining waste, as per Par. 1. (1) is as follows: "the scope of the regulation covers the treatment of the prospecting, extraction, processing and storage of mineral raw materials (hereinafter: mining waste)". It is exactly the processing of a mineral raw material (bauxite) that is processed by an alkaline treatment by MAL Co. Ltd. (at its Ajka site), red mud being the waste product of this process.

Protection against risks related to the reservoir

Owing to the damage of reservoir basin X was to be explained by, beyond the fault of the facility, the deficiencies of the preventative system of protection.

Act LXXIV. of 1999. on the direction and organisation of the protection against disasters and against accidents related to hazardous substances, entering into force on 01.01. 2001., specifies the rules for the protection against serious accidents together with rules for the protection against serious disasters and emergencies owing to other reasons. ON the one hand, the act declares, that protection and damage control are tasks of the sates, and defines which authorities shall take part in it. On the other hand, according to the rules of special obligations, it provides for protective and preventive measures described in section 4 for so-called dangerous plants and facilities.

Their scope is defined depending on the hazardous materials over threshold values used in them. Section four of the act describes separate obligations of protection, but these do not need to be fulfilled for the period of the law entering into force until 12 January 2006 in the case of landfills, among others (ART. 4.(3)e.) This exception is explained by the fact that damage control measures for the exceptions specified are regulated by further, separate regulation, with the two ministerial regulations cited above prescribing the drafting of a damage control plan for the landfills.

The Act serves compliance with Directive 96/82/EK (SEVESO II). The rules of the Directive were equally did not cover landfills among others until 31. 12. 2003. This EU legislation has been modified under the impact of the events of 2000, a year especially full of industrial disasters. Directive 96/82/EC was modified by directive 2003/105/EC on several counts. The modifications resulted in précising the landfills excluded from its scope, and extended the directive on certain tailing ponds and dams:

g) waste land-fill sites, with the exception of operational tailings disposal facilities, including tailing ponds or dams, containing dangerous substances as defined in Annex I, in particular when used in connection with the chemical and thermal processing of minerals.

The modification of the exception was adopted by Hungarian law with entry into force by 12. January 2006.

(3) The scope of section 4 of the Act excludes:
e) waste land-fill sites, with the exception of facilities for the processing of tailings and slurry resulting from the extraction of mineral raw materials (including tailing ponds or dams), with the presence of high quantities of hazardous materials reaching determined thresholds, in particular when used in connection with the chemical and thermal processing of waste materials.

The extension of the Directive and the Act onto other facilities such as landfills described by the above-mentioned criteria affects the obligations falling on other facilities as well. The Directive systematically adheres to the principle that existing facilities coming to fall under its scope after the modification shall have to comply with its provisions over a short period.

Hungarian law deals with the modification of Directive 2003/105/EC not among the provisions of the Act but within a separate regulation. Due to the extended scope of the Act, Government decree 18/2006 contains detailed rules compatible with the directive for existing facilities that will come under the scope of disaster protection regulations owing to the extension of the scope.

Special rules governing mining wastes

The deficiency, referred to above, of ministerial regulation on landfills, i.e. the rules governing non hazardous mining waste is rectified by regulation 14/2008 GKM, in force since 11. 04. 2008. The scope of the regulation covers all hazardous and non hazardous waste the are directly related to the extraction or processing of the raw material, and does not fall under the scope of any other waste management regulation. The provisions of the regulation are rather strict. Only waste products with limit of hazard levels might be excluded from its jurisdiction, e.g. inert non polluted soil, and these only under special circumstances.

Defining the hazard level of waste is very important. It is used in the widest sense and does not link it to being part of or registered in a list or inventory.

"Hazardous waste: waste characterised by one or more attributes specified in Appendix 2 of the Act on Waste Management, or containing such substances or components, that poses a risk to health or the environment due to its origin, composition, concentration."

According to the rules defined by the regulation. the permission granting authority is the mining directorate. The process combines the requirement of the best available technology (IPPC) taken from the integrated environmental use procedure, the requirements of the protection against serious industrial accidents (Seveso II), the rules of liability for environmental damage and financial security deposit, the participation of the public (Aarhus). Altogether, it is an integrated piece of legislation with a sophisticated perspective.

It is an important regulatory item that the waste management facility also belongs under the authority of the mining directorate in terms of being a special kind of built structure. The deficiency referred to above that is that pos inspection on the part of the permission granting authorities is not a characteristic of Hungarian law is rectified by this regulation. It expects the operator to carry out regular monitoring activities at least yearly, in terms of the condition of both the built structure and the waste. The results of the monitoring activity are revaluated by the authority which may decide to initiate supervision by independent experts. Over and beyond yearly inspection, the operator is obliged to supervise all such facilities every five years. Furthermore, it is a noteworthy provision of the regulation is not of a static, but rather a flexible reactive character: thus the authority can modify the permit of the functioning facility not only upon request, but in its own competence of arbitration, if that is justified by the results of the monitoring report, or if the best available technology, as registered by the EU, has changed.

Directive 2006/21/EC on the management of waste from extractive industries equally provides for existing facilities:

"(36) The operation of waste facilities existing at the moment of transposition of this Directive should be regulated in order to take the necessary measures, within a specified period of time, for their adaptation to the requirements of this Directive."

Hungarian regulation features this requirement against the provisions on entry into force, and prescribes for operators to comply with technological and other requirements concerning operating landfills as formulated within the Directive by 01.05. 2010. Unfortunately, though it is described in eloquent terms, the financial security deposit still is an exception to the deadline, for the deposit only needs to be presented by may 2014.

The disaster investigated has in fact illustrated the point that even if domestic law complies with the directive on mining waste management, the rules of financial security deposit should be presented by operators over a much shorter period. It would be by all means justified to expect operators to present the appropriate financial security deposit by the general 2010 deadline.

The directive on the management of waste from extractive industries was duly and properly adopted by Hungarian law and it has entered into force. Nevertheless, the question still remains why did its practical implementation fail in the case presently investigated as well.

The rules of liability for environmental damage caused by the operation of and injuries occurring to the reservoir basin X.

Act LIII of 1995 on the protection of the environment, as the general legislation relevant to the present activity has included the obligation since it entered into force on 19. 12. 1995 that the rules for providing a security deposit and dedicated reserve as well as liability insurance shall be regulated by a government decree within the process of environmental licensing.

Similarly, **the act declares as a general rule of liability that the licensee has a special liability to damage caused through the use of the environment that can be limited or warded off only under strict circumstances. The modification of the law in 2007 declared special liability rules for the owners and private managers of the entities causing harm. The general rules however are not sufficient to provide for the satisfactory and available financial coverage and for this reason failing to create the government decree referred to has been a very serious omission on the part of legislators.** In terms of certain sectors, and focusing on areas raised in relation to the present issue, managing certain kinds of waste, granting permission for landfills and mining activities are all covered by regulations which include the obligation of providing security deposits.

- The Act on Mining declares providing a security deposit optional until 1 January 2008, and mandatory after that date.

• Regulation on landfills requires proof to be provided of the existence of security deposit since 13 December 2007.

Nevertheless, there is no appropriate detailed regulation on the dimensions of the deposit, and a formal exigency of having the deposit provides no guarantee for the costs of eliminating environmental damage wrought.

The relevant basic EU legislation is Directive 2004/35/EC on environmental liability and the prevention and elimination of environmental damage. The fundamental idea of the directive is to make the polluter pays principle mandatory in the field of environmental damages.

The directive was adopted by Hungarian law, on the one hand by a modification of the act on the environment, and on the other hand, by issuing a specific government decree. Applying the polluter pays principle had already been mandatory before adopting the Directive, due to the general and special rules mentioned above, though with the deficiency concerning financial deposits. Equally, the general obligation of preventing environmental damage dates back to the time the law was adopted. The more precise rules, adopted with the implementation of the directive, have been in force since 30 April 2007, under articles 102/A-B. These provisions on the user of the environment concern measures to be taken in order to prevent harm, to reduce the threat of damage and the obligation to report damage immediately, and on the other hand the monitoring and steps to be taken by the authorities. The provisions reflecting the directive are contained in articles 102/A-B of the Act and Government Decree 90/2007. It is an important fact that based on the text of the Act, the authority may request information on environmental use and damage at all times, but the business entity is under obligation to notify the inspectorate immediately of the threat of the damage or the damage occurred, even when it has not in fact been asked to do so, on the basis of the Government Decree.

The provisions of the Directive on mandatory financial security deposits were formally taken over by Hungarian legislation, when it called for providing proof of the deposit in regulations governing activities in the scope of environmental use defined in the Directive (waste management, activities based on the of hazardous materials and goods and mining activities linked to an integrated environmental permit).

Hungarian legislation, the Act and the Government Decree referred to above comply with the Directive regarding the prevention and exposure of the threat of damage and damage control. However, actual financial liability for the damage which is one of the cornerstones of the directive has not been properly implemented in the required scope. It is an obvious deficiency of Hungarian legislation that it lacks the framework regulations that would make it a mandatory prerequisite for granting permission to and for operating all activities with a threat of environmental damage to have a cost assessment made with the participation of an independent expert, based on which the authority would be under obligation to demand proof of the appropriate financial guarantee from the parties engaged in activities of environmental use.

5.3. The Role of Authorities

The severity of the red mud catastrophe in Ajka owes to factors such as

- the dam break as a rapidly occurring phenomenon, as well as the enormous amount of matter spilled, both of which are extremely hazardous factors even by themselves,
- the caustic effect of the spilled matter, as well as its irritating nature, both of which proved to be hazardous to humans and the environment alike,
- the extraordinary amount of means (both material and financial) required for damage control,
- the feasibility of damage control, given the nature and extensiveness of damages (rectification of the environmental impact – disaster recovery).

Due to the above, we are investigating the role of authorities concerning the red mud catastrophe in Ajka not in general, but rather as being grouped around the main factors accounting for the severity of the catastrophe.

5.3.1. The dam break

The Mal Co. Ltd. Site at Ajka was granted its integrated environmental permit ("Integrated Environmental Permit" or "Permit") by order No. 12785/2006. of the Transdanubian Environmental Protection, Nature Conservation and Water Affairs Inspectorate (KDKTVF or "Inspectorate"), requests towards the relevant authorities were also supplied by the Inspectorate. Environmental aspects of the activities have been supervised by this body ever since.

The permission-granting order of the Inspectorate is largely based on the integrated environmental permission requesting documentation submitted by MAL Rt. Site at Ajka ("Documentation"). These documents (i.e. the Permit and the Documentation) enlist the factors that may risk the environment of the activity (noise sources, possibilities of air and groundwater pollution, etc.). Contaminations in the surrounding control wells (fluoride, cyanide, etc.) were thoroughly tested between 1990 and 2000 and vertical blocking walls were built around the reservoirs. "The environmental effects of red mud reservoirs primarily occur in the form of atmospheric emissions and alkaline contamination of the groundwater." (page 144, chapter 4.6.2. paragraph 2.). Of course, the effects of noise, air pollution, propagation of dust were also investigated, the latter tested also concerning the reservoirs.

Nevertheless, neither the Documentation or the Permit identifies dam break as a risk factor.

The properties of dams are specified in the Documentation, it refers to expert opinions in soil mechanics (4.4.2.), but the latter were used only for surveying hazards to groundwater.

All this is anomalous since rupture is an inherent risk factor of dams. Although **the Documentation refers to the reduction of hydraulic pressure as desirable (p. 104 in sec-**

tion 4.3.4.), nevertheless, the possible consequences of hydraulic pressure are not further elaborated. The role of wind in propagating dust is taken into account, whereas the wave generating effects of wind on the 2-acre water surface are not. Although in Point 16.05. of the Permit, the relevant authorities set forth the preparation of an annual status survey concerning the red mud reservoirs, which has to include data on their sinking, still the possible degradation of the reservoirs as constructions, etc. is not considered otherwise.

Neglecting the risk of dam break is rather surprising given that the operators had direct experiences of such events. According to the Documentation (6.1., p. 160), a dam break occurred during the construction of Reservoir 10 on November 3, 1991, resulting in 43,200 m^3 of alkaline (pH = 10-11) slag water escaping into the environment, thus polluting the rivers Marcal and Rába through the Torna stream to a traceable extent.

Government decree No. 193/2001. (X. 19.) was applied upon the granting of the Permit, and it sets forth the identification of sources of pollution, as well as of "solutions for the disposal of non-recoverable waste in a manner excluding environmental pollution or damage" (appendix 3, point k)). Anyways, an enormous reservoir, designated to retaining thousands of tons of mud, towering 21 to 25 meters above ground level (Documentation, table 4.3.4.b., page 101), is a danger to its environment, however thick a dam it is girdled with.

In case of concerns, the Inspectorate has to contact the authorities in accordance with appendix 4, chapters 1. and 2. of Government decree No. 193/2001. (X. 19.). A special expert building authority has to be consulted, still there is no expert opinion concerning the dam mentioned in the resolution. **The Notary of Ajka specifies only that disposal of hazardous waste on the abandoned landfills is forbidden.**

In summary, neither Mal Co. Ltd. requesting the Permit, nor the Inspectorate granting the Permit (or the relevant building authority) took into account the inherent risk of breaking of dams as a source of notable hazard to the environment, which is an elementary fault.

5.3.2. Caustic effect and irritating nature of the spilled material

Both the Documentation and the Permit refers continuously and systematically to red mud as non-hazardous matter. Although the Hungarian legislation prior to January 1, 2002 treated red mud exclusively as hazardous waste, later on qualifying it as non-hazardous waste became possible depending on the technology applied.

As we noted above, the legislative amendment effective of December 4, 2003 transfers the obligation of waste qualification on the owner of the waste ("4. § (1) Qualification of the waste – concerning the hazardous nature thereof – is bound to be performed by the producer of the waste, or, if the former is not identifiable, by the owner thereof, in accordance with separate legislation."), after that, the Inspectorate only "acknowledged" the qualification of the owner. However, since the qualification is based on laboratory analysis, it shall be assumed that at the time of requesting the Permit, the pH-rate of the red mud did not exceed the limit of qualification for hazardous waste.

However, point 9.03. of the Permit obliges the owner to continuously keep up-to-date records on the waste, and present its summary to the authorities annually (or, in the case of

hazardous waste, quarterly). In accordance with point 4.01., important changes have to be reported to the authorities within 15 days, and the waste's becoming hazardous is positively an important change. **Omissions by the Licensee are unequivocal, either for the omission of the obligation of continuous record-keeping and/or for the omission of the obligation of reporting important changes.**

In the course of investigating the anomalies in the management of red mud waste, repeated note must be made of the liability of the District Mining Inspectorate. Their argument, stating that their authority is effective if a permission has been requested (letter No. MAL-171/2010. by the Government Commissioner to Soledad Blanco, page 6), is simply incorrect. According to 5.§ (1) of Law No. XLVIII of 1993 on mining, which provides the legislative framework for the decree, the mining inspectorate allows the management of waste arising in the course of mining activities (point h), and is otherwise introduced authority with procedural obligations not only in the case of permitted activities, but also if they detect the carrying-out of unauthorised activities.

It cannot be assumed that the competent District Mining Inspectorate was not aware of the activities of Mal Co. Ltd. at Ajka, given the latter's history going back to approx. 60 years, as well as its national ecopolitical importance, not to mention the mining permissions granted for its activities by the District Mining Inspectorate.

5.3.3. The extraordinary amount of material and financial means required for damage control

Besides measures taken for the prevention of identified risks, the management of damages needs to be arranged as well. Damage control has financial conditions. These financial conditions are to be provided by the law sections recording the obligations and possibilities of assurance provision and insurance underwriting, namely by 101. § (5) of Law No. LIII of 1995 on environmental protection, and by 47. § (1) of Law No. XLIII of 2000 on waste management. These regulations are void since there exists no sufficient decree for their enforcement. Due to this, application of these law sections is voluntary, and therefore, predictable and secure financial conditions for damage control cannot be provided. The all-time governments are liable for the omission of decreeing (and thereby, for omitting the enforcement of Article 8 (2) of Directive No. 2004/35/EC in the international law).

5.3.4. Other significant anomalies in the operation of the environmental protection system (incentives for prevention and the means of damage control)

According to point 11. of the Permit, the Licensee is obliged to employ a commissioner for environmental protection and to make him available for contact to inspectors of the Inspectorate at any time. It is not known whether the company met this obligation or not. The self-assessment plan or the contents of worklogs (which, by the way, are to be cleared at the end of each calendar year and kept for 5 years) are not known either.

Point 12. of the Permit disposes of the obligation of the Licensee to report the following towards the Inspectorate:

- operational status other than designated (in case of malfunction)
- in case of non-permitted emissions resulting from the activity
- in any and all cases that may result in threatening or contamination of surface water or ground water, of air or soil, and requires/may require acute intervention.

At the same time, in all these cases, the assigned authorities to be informed are (point 13.):

- the Inspectorate,
- Veszprém county Directorate for Disaster Management (in case of fire and disaster),
- Veszprém county Institute of the National Public Health and Medical Officer Service (upon occurrence of accident and operational status that threatens human health)

No legal references are made, the Directorate for Disaster Management is not listed under point 18. as an expert authority.

That is, neither the District Mining Inspectorate or any other state organ is listed among the authorities.

Records—obligations of reporting

The Permit disposes of obligations of continuous reporting, the completion of which is due within 8 days of the end of the actual fiscal quarter in concern of hazardous matter, and on March 1 of the year following the actual fiscal year in concern of non-hazardous matter.

Within the framework of reporting, the Permit disposes of the Licensee's obligation of data supply towards the Inspectorate with a deadline and data content as per appendix 1. Reporting frequency for each report type is treated in the appendix in a resolution in accordance with effective regulations – this obligation has been met by the company.

Appendix 3 specifies emissions limit values in concern of cleaned industrial water released into the Torna stream. This value in concern of the pH rate is set between 6 and 9.5, which contradicts point 9.02. of the Permit, wherein the same value is between 8.0 and 8.5 pH. The textual amendment emphasizes the necessity of measuring the volume and pH rate of the cleaned industrial water prior to its release into the Torna stream.

However, it is expressly set forth in the Permit that the weaker limit value set in appendix 3 is to be applied in concern of waste water emissions, i.e. a pH rate of 9.5 is also considered acceptable. The justification for this remains unknown as well.

It is set forth that an overall report on the supervisions conducted and the observations made

during the operation of the landfill (red mud reservoir basins) is to be submitted by the Licensee to the Inspectorate annually (prior to April 30 of the year following the actual fiscal year).

This report is to include the following:

- Site description of the landfill along with data thereon
- Status description of the landfill
- Data on the sinking of the levels of the landfill
- Results of ground water analyses

Based on the available documents, such continuous reporting has been concluded only partially.

In case of emergency occurring at the Site, the measures set forth in the water quality damage control plan are to be taken. Therefore, the damage control plan shall be considered part of the Permit.

Point 18. refers to altogether two provisions made by expert authorities:

- Provision by Veszprém county Institute of the National Public Health and Medical Officer Service: "The activities must not generate hazardous impact on human health in employees and the surrounding residential area."
- Provisions by the Notary of the City of Ajka: "Landfills for hazardous waste must not be established on the area of abandoned slurry reservoirs. The abandoned slurry reservoirs must be continuously recultivated and strengthened."

The two provisions by the expert authorities are rather evasive. In addition, the one by the Notary is intriguing since all through the Permit, provisions were made in concern of non-hazardous "slurry" reservoirs, while at this point hazardous landfills are mentioned.

The justification in the Permit is as follows:

With reference to point 9.08, in concern of the collection of waste produced on-site the provisions are justified by 5§ of Government decree No. 213/2001 (XI.14.) on the conditions of conducting activities relating to municipal waste, as well as by 5§ (3) of Government decree No. 98/2001. (VI.15.) on the conditions of conducting activities relating to hazardous waste. Further reference is made to points (29 b), 14§ (1), (2), and 51 §(1) of Law No. XLIII of 2000 on waste management, as well as to Government decree No. 164/2003. (X.18.) on record-keeping and data supply obligations in relation to waste.

In the section justifying the commitment made by the Notary of Ajka as expert authority, reference is made to appendix 4 of Government decree No. 193/2001. (X.19.), through which to Municipal decree No. 11/2001. (VII.02.), i.e. reference is made to paragraphs 28§ (20) and (21) of the regulatory plan and local building regulations of the City of Ajka.

In the section concerned with ground water protection: "During the activities, self-contained technologies are utilized, during the operation of which raw materials, end- and by-products may not contaminate the soil directly. Contamination may occur only in case of malfunction 'emergency,' as well as during the transport, loading, or storage of accessory and raw materials. Red mud is transmitted to the storage basins through a closed piping system, therefore, besides the environmental impact of the basins, the red mud may cause soil contamination only in case of a failure in the transmission piping system."

Point 22. of the Permit, and the later references made to the monitoring results and to 6§ (1) b) and c) of the law on environmental protection in the justification section imply that the basin that met the accident is in order. Moreover, the passage stating that "besides Basin 10/a, a new reservoir is to be erected in the area on the northern side of Basins 9 and 10" can be interpreted as proving the security of the technology. References are made to investigations conducted in 2003 as vertical enclosures (curtains) were built to protect the Kolontár area against contamination.

"Due to the construction of the vertical enclosures the state of the red mud reservoirs' environment saw significant improvement." (Note that posterior evaluations partly associate the construction of the curtains with the soaking of the soil under the dam base, and thereby indirectly, with the dam break.)

In the light of the above it can be stated that even within the framework of the integrated environmental permit it is possible to miss the evaluation of important risk factors (possibility of dam break), and moreover, clarification of obvious contradictions (pH rate of 11.8 along with qualification as non-hazardous), and such shortcomings cannot be remedied by the monitoring options of the authorities.

Changing the monitoring options of the authorities to obligations would upset the system, in which the licensee—and not the authority—executes risk identification and is responsible in case of realization of the risks.

However, the system—also in its current form—is deficient. Obligation of self-assessment may be introduced to the licensee along with collateral cost bearing and liabilities, nevertheless it remains a void commitment until (financial) liability of the licensee is not warranted. If financial liability of the licensee remains voluntary for the lack of regulation, then neither damage prevention or even damage control is motivated by economic interests.

Legislative ruling of the financial conditions of the licensee's liability may be the sole resolution. Deposit of a security motivates for damage prevention (supplying real input data upon the licensing application, complying with the provisions set out in the permit to avoid immediate financial liability, and for the subsequent narrowing of liabilities), provides latitude in damage control for both the licensee and the state, which is at times forced to act on behalf of the former, the insurance covers the damages made to third parties and the environment.

5.4. Charges filed following the tragedy

5.4.1. Official and political charges

The Veszprém Police Department initiated investigation in concern of the accident the day after it took place, which was on October 4. Three days later the presumptive criminal action was requalified in the procedure as endangerment due to professional activities resulting in a lethal mass disaster (the first suspicion was reckless endangerment due to professional negligence resulting in manslaughter), and the case was taken over by the National Bureau of Investigation. According to police communications, currently investigation of the already confiscated documents, interrogation of witnesses, and involvement of experts are in progress. Associates of the National Bureau of Investigation are in close collaboration with the Veszprém Police Department and the joint authorities, as well as with the municipalities concerned and those participating in damage control operations. In the first days of the investigation, which chiefly consists of analyses of documents and auditions of witnesses, the police took the general manager of Mal Co. Ltd. into custody and initiated his pre-trial detention. The issue got political overtones as the detention was announced by the prime minister prior to actual police action. Zoltán Bakonyi, who was released uneventfully a few days later, was suspected of environmental damaging and public endangerment resulting in multiple fatalities in connection with the mud disaster. The general manager of Mal Co. Ltd. was accused of the signing of the company's disaster management plan, which according to the authorities was deficient as it did not provide an action plan for management of accidents like the one that occurred, moreover, of not having established appropriate ramparts and signalling alarm systems. According to the primary suspicion of the police, the mud disaster occurred exactly due to the fact that the management of Mal Co. Ltd., besides not having an elaborate action plan, has not made sure of the adequate state of the dam. At the same time, a paper signed and stamped by the competent executive of the regional Transdanubian environmental protection and water affairs expert authority proves that the expert authority found everything appropriate nine days before the disaster.

5.4.2. Charges by NGO's

As pointed out above, the Clean Air Working Group submitted a warning letter to the government already in 2003, asserting that the some 30 million tons of red mud accumulated in the course of decades poses unpredictable risk. According to the commitment made by the organization, the issue is twofold. On the one hand, the accumulated waste matter is an environmental risk factor. On the other hand, production of alumina and aluminium hydroxide—although in a lesser amount—is still continued to this day, and the production of each ton of alumina result in the production of 2 tons of hazardous waste. The reservoirs take away valuable land area from agriculture, plus the wind carries the dry red mud to distant residential areas in the form of dust clouds. Dilute alkali content of the mud is leaking into the soil, which endangers the vegetation as well as the area's drinking water supply. According to the Clean Air Working Group, upon privatization the new owners agreed in contract to manage the environmental damages that add up to 10 billion HUF, nevertheless, no information has been issued thereon so far in spite of that

such information qualified by the effective laws as being of public interest. The organization in 2003 advocated the initiation of a comprehensive international campaign for the elimination and development of the red mud reservoir areas, suggesting that Hungary ask for contributions by the EU and other developed countries to an environmentally non-destructive way of development of such matter, as well as to the neutralization thereof. The Clean Air Working Group solicited this suggestion to a number of government members and government officials several times, still no substantive response has been given.

Likewise, an expert at the Clean Air Working Group filed a complaint to the Prosecution Service in 2006 due to the red mud reservoir areas' endangering drinking water bases at several locations. The situation at the Mosonmagyaróvár reservoir of MOTIM is especially distressing as in this case, the red mud is disposed over the water base—which is a place where also the disposal of the city's communal waste is forbidden, exactly in order to protect the water base. However, no investigation was initiated by the Prosecution Service, since their audit confirmed that the measures taken by MOTIM complied with the effective regulations of the law. According to the Clean Air Working Group, it is not the Prosecution Service that is primarily responsible for the lack of taking action, but rather the competent environmental protection inspectorate, which—reportedly—misinformed the Prosecution Service under heavy political pressure.

Since inappropriate official monitoring may have contributed to the red mud disaster in Ajka, the Debrecen-based Society of Conservationists of Eastern Hungary filed a criminal complaint to the Chief Prosecution Service against an unknown perpetrator or unknown perpetrators in the subject of the suspicion of reckless endangerment due to professional activities resulting in a lethal mass disaster after the accident in Kolontár. The legal position of the non-governmental organization is that the competent environmental protection authority did not comply with the applicable provisions of the government decree on ground water protection, as well as of the recommendation on determining the minimum requirements for environmental monitoring executed in member states during the on-site investigation carried out on September 23, 2010 on the basis of the decree on the environmental impact monitoring and the integrated environmental licensing procedures. Laws for environmental protection set forth rigorous on-site monitoring of activities to be carried out by the environmental protection authorities exactly to allow for the avoidance of such ecological disasters.

5.5. Liability assessment

5.5.1. Liabilities of the authorities

The above legal analysis points out that all domestic authorities that were involved in the licensing and monitoring of the red mud reservoir that met with the accident committed errors.

- The Transdanubian Environmental Protection, Nature Conservation and Water Affairs Inspectorate acknowledged the qualification of the disposed matter as non-hazardous waste, thereby substantially easing the requirements concerning the disposal and the monitoring thereof.

- The same environmental protection inspectorate accepted as part of the Permit the unrealistic disaster management plan by Mal Co. Ltd., which allowed for the maximum spillage of 300.000 m^3 of matter in case of disaster, whereas in reality, the volume of escaped matter was approximately three times larger. The signing of this disaster management plan is listed among the charges against Zoltán Bakonyi, general manager of Mal Co. Ltd., yet the possibility of the liability of the authority in connection with that was not raised.

- The Inspectorate failed to involve the competent District Mining Inspectorate in the licensing procedure.

- Although the Notary of Ajka prohibited the disposal of hazardous waste at the landfill, nevertheless no action was taken against de facto disposal of hazardous waste in the area.

- Although from 2008 on, licensing of the disposal of waste from mining is within the scope of authority of the mining inspectorate, the competent District Mining Inspectorate did not check the technical appropriateness of the structure used for disposal, and did not enforce the application of the best available technology in concern of the disposal (i.e. switching to dry technologies).

- ENone of the authorities involved paid substantial consideration to the risk of dam break.

- Upon the conclusion of the contract of privatization, provisions of BAT and IPPC should have been considered. In Mosonmagyaróvár, the so-called dry storage has been applied since the mid-80s, which is far more secure. Mal Co. Ltd. has only been recently obliged to do so by the permit issued by the authority after the disaster.

5.5.2. Liabilities of MAL

Liability of the company operating the landfill is graspable in that in the course of applying for the integrated environmental permit, they qualified the disposed matter as non-hazardous despite the fact that qualification criteria for hazardous waste subsisted unequivocally based on the alkalinity. Besides that, the company is partially liable for the belated and partial observation of the provisions on environmental protection set forth in the contract of privatization. Non-occurrence of the switch (or, of the preparation thereof) to dry disposal technology – even as late as submitting application for the integrated environmental permit – is once again the company's partial liability.

5.5.3. The consequences of decisions made in the course of damage control (impact of gypsum and hydrochloric acid)

The aim of the damage reducing measures taken in the days following the dam break was the mitigation of the spatial extension and the severity of environmental damages. Decisions concerning such measures were made in an emergency situation, without lengthy pondering. Bearing all this mind, deployment of gypsum and hydrochloric acid was (also) justifiable in the given situation, at the same time however, damage alleviation could have been executed in a more watchful manner, with lesser environmental risk. The materials deployed are by-products of industrial activities, the exact composition or incidental contamination thereof is not known. Groups of experts from WHO and the EU advocated the monitoring of long-term environmental impact of these materials within the polluted natural waters.

5.6. Room for improvement in the regulatory environment

5.6.1. An assessment of the implementation and enforcement of EU regulations

Our analysis showed that in connection with the adoption of EU regulations on environmental protection, which are applicable to the case, the following have not occurred:

- establishment of the appropriate regulatory environment for the rules of Directive No. 2008/98/EC on landfills, adoption of the directive to the national provisions,

- compliance with Directive No. 1999/31/EC (in regard of the hazardousness of waste produced in the course of mineral raw material extraction, as well as of the technical configuration and environmental security of the reservoirs),

- appropriate adoption in concern of Resolution No. 2003/33/EC, which contains detailed specifications on the technical and aptitude parameters of all types of landfill facilities, as well as on the obligation of regular independent monitoring and the qualification procedure of the waste received (since this is not applied by Hungarian legislation to some of the facilities concerned, such as to Reservoir 10 in Ajka),

- establishment of harmony with Directive No. 2006/21/EC on the management of waste from mining (in regard of deposit of a security),
- complete adoption of Directive No. 2004/35/EC (on environmental liability, prevention and remedying of environmental damage): provisions of the directive concerning compulsorily required financial security have only been adopted pro forma by the Hungarian legislation, actual financial liability for damages is not appropriately and comprehensively regulated.

5.6.2. Required regulatory changes

The Hungarian law is completely lacking the legal framework that would require a cost estimation prepared with the involvement of an independent expert as licensing and operational feature of all activities threatening with environmental damages, on the basis of which the authority would be obliged to require a certificate of adequate financial warranty from the user of the environment. It is also necessary to define the exact financial conditions of the licensee's liability. On the one hand, deposit of a security motivates for damage prevention, on the other hand it assists both the licensee and the state, which is at times forced to act on behalf of the former, in damage control, and thirdly, the insurance covers the damages made to third parties and the environment.

The collective introduction of a joint insurance fund (that would be filled up by the payments made by the companies concerned) and a compulsory liability insurance is desirable for the above aims.

Preliminary supervision and regular official monitoring of the waste during operation is inevitably necessary (also as regulatory requirement) in the case of waste disposal activities to determine whether the waste product set out in the permit is identical to the waste that is actually handled, as well as to determine whether the current state and the properties of the waste product set out in the permit complies with the hazard characteristics given the effects of unloading and passage of time.

The establishment of the appropriate regulatory environment for the rules of Directive No. 2008/98/EC on landfills, and the adoption of the directive to the national provisions is just as well indispensable.

It seems expedient that in the future, the impact assessment documentation required for the licensing should be prepared by experts independent of the licensee and appointed by the authorities (in this concern, the LMP (Politics Can be Different) prepared a legislative recommendation in November 2010). Certain environmental uses require regular independent supervision in order to filter out hazardous situations resulting from these activities.

Summary

All Hungarian authorities with a role in licensing and monitoring the accident-stricken red mud reservoir had committed errors.

- **The Central Transdanubian Environmental, Nature Protection and Water Management Inspectorate had endorsed the classification of the deposited material as non-hazardous waste, thus significantly relaxing requirements on disposal and subsequent monitoring.**

- **The environmental authorities endorsed the unsubstantiated disaster management plan handed in by MAL Co. Ltd.**

- **The Inspectorate failed to engage the competent District Mining Inspectorate in the licensing process.**

- **The notary of Ajka had prohibited the depositing of hazardous waste in the reservoir, but failed to take steps when hazardous waste was in fact deposited in the area.**

- **Although the licensing of mining waste deposits has been the competence of the Mine Supervision since 2008, the competent District Mining Inspectorate did not check the structure of the disposal site for technological compliance, and failed to enforce use of the best available technology with regard to disposal (conversion to dry technology).**

- **None of the authorities substantially considered the risk of a dam break.**

- **When the privatisation contract was concluded, IPPC and BAT requirements were not taken into consideration. Neither was compliance with these requirements subsequently enforced in an exhaustive manner by either the environmental or the construction authorities.**

Regarding the occurrence and the severity of accident, a decisive factor was the Hungarian authorities' failure to treat the red mud deposited together with the slurry as hazardous waste in the course of the licensing and inspection process, even though the alkalinity of the material in the reservoir that was later damaged would have justified this. Licensing hazardous waste disposal entails imposing stricter standards and the participation of more authorities than is required for treating non-hazardous waste. A more thorough procedure might have shed light the technological risks of the landfill and the deficiencies of the emergency plan.

The company acting as the landfill operator bears liability for classifying the deposited material as non-hazardous at the time of applying for the integrated environmental permit, even though the alkalinity levels clearly met the criteria for hazardous waste. The company also bears partial liability in failing to meet the environmental requirements specified in

the privatisation contract fully and on time. Similarly, the company bears partial liability for failing to ensure the transition (or the preparation for the transition) to a dry depositing technology, at the latest, by the time of requesting the integrated environmental permit.

Furthermore, the occurrence of the accident can be linked to regulatory anomalies owing to the fact there had been deficiencies in adopting and properly implementing EU legislation.

The relevant Hungarian legislation only partially matches "Directive 2008/98/EC on waste requirements". Though it should have entered into force by 12.12.2010, the Directive was not fully implemented in Hungary. An important fact concerning the issue of the responsibility of authorities is that the waste treatment plant belongs to the competence of the Mine Supervision under Hungarian legislation. The directive cited imposes an obligation of regular monitoring on the operator, to be carried out at least annually with regard to both the condition of the built structure and of the waste, but this obligation was not fulfilled in practice.

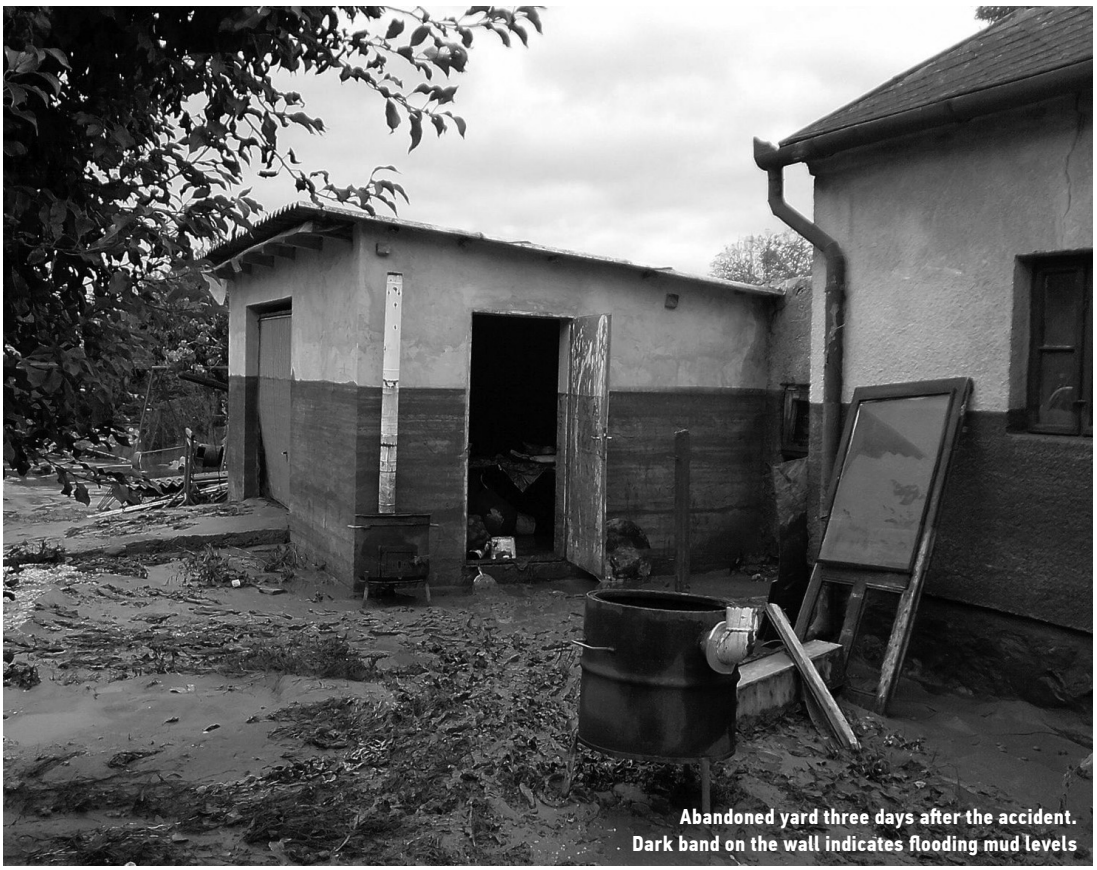
According to the Act on the Environment, the permit-holder (along with the owners and managers of legal entities which cause harm) has increased responsibility for damages incurred through use of the environment, a responsibility which may only be limited, or transferred under very strict conditions. However, these general rules apparently come short of providing for adequate and available financial means needed to cover for the damage incurred. According to the Act adopted in 1995, the rules governing the obligation to provide a security deposit and to establish dedicated reserve funds in the course of the environmental licensing process and the rules on liability insurance policies shall be laid down in a government decree. This objective has only been formally met so far.

The documents available demonstrate that authorities in charge of granting permits and inspection have not at all reckoned with the possibility of dam break.

On the whole, the EU legislation examined in the present analysis, provided it is adopted and implemented in line with the intent of the legislator, seems suitable for the prevention of similar accidents and for managing the consequences thereof. At the same time, there is a need to adopt uniform classification criteria for hazardous waste, unified EU-wide regulation governing security deposits and liability insurance (at least for reasons concerning competition law), and a common EU environmental emergency fund set up to cover environmental damage that can not be remedied otherwise.

Recommendations

The suggested measures conclusive of the legal analysis are included in point 5.6.2. of the chapter.



Abandoned yard three days after the accident.
Dark band on the wall indicates flooding mud levels

6. International comparison

6.1. Alumina production in other parts of the world

The basic raw material of aluminium production, i.e. alumina is produced out of bauxite. Bauxite is one of the (not very common) components of the earth's crust. It is produced by surface mining which means the mineral can be produced after stripping off the upper surface of the earth's crust. The world's bauxite reserve is estimated at 55 to 75 billion tons.[1] The world's three top bauxite producer countries are Australia, China and Brazil. In 2003, Hungary was ranked as 16th largest bauxite producer in the world.[2]

[1] BAUXITE AND ALUMINA http://minerals.usgs.gov/minerals/pubs/commodity/bauxite/mcs-2011-bauxi.pdf

[2] Bauxit, http://hu.wikipedia.org/wiki/Bauxit

The country's annual bauxite production was estimated at about half a million tons in 2005.[3] However, this value dropped by half since then as today only MAL Co. Ltd. produce bauxite in Hungary, altogether 240,000 tons in 2009.[4]

Country	Annual production (million tons)
1) Australia	65,2
2) China	40
3) Brazil	28,2
4) India	16
5) Guinea	15,6
6) Jamaica	7,8
7) Russia	5,8
8) Kazakhstan	5,1
9) Suriname	4
10) Venezuela	2,5
Altogether	199

Table 1: The world's bauxite production in 2009[5]

At least half of the industrial bauxite consists of aluminium oxyhydrates and minerals (gibbsite, boehmite, diaspore) along with a significant level of iron oxides (hematite, goethite), and silicic acid and titanium minerals as well. The two main types of bauxite is the karst bauxite which is formed on carbonate rocks and the so-called lateritic bauxite which is formed on alumonisilicate rocks. Lateritic bauxites can be found in tropical or subtropical areas.

Composition	Karst bauxite	Laterite bauxite
Al_2O_3	48–60	54–61
SiO_2	3–7	1–6
Fe_2O_3	15–23	2–10
TiO_2	2–3	2–4
CaO	1–3	0–4
Heating loss, mostly H_2O	10–14	20–28

Table 2: The composition of karst and lateritic bauxites (% on waterless base) Source: Wikipedia[6]

[3] Bauxite: World Production, By Country
http://www.indexmundi.com/en/commodities/minerals/bauxite_and_alumina/bauxite_and_alumina_table11.html

[4] http://www.hirado.hu/Hirek/2010/10/07/15/Gorcso_alatt_a_MAL_Zrt__Tudjon_meg.aspx

[5] BAUXITE AND ALUMINA http://minerals.usgs.gov/minerals/pubs/commodity/bauxite/mcs-2011-bauxi.pdf

[6] http://hu.wikipedia.org/wiki/Bauxit

Through the Bayer process (which is commonly used all over the world now) aluminium oxyhydrates are dissolved from bauxite ore at a relatively high temperature along with a sodium hydroxide (NaOH) solution. During the decomposition process, gibbsite bauxites are normally heated up to 140°C, while boehmite bauxites, which can be found in Hungary, are processed at a temperature of 240°C. After separation of ferruginous residue (red mud) by filtering, pure gibbsite is precipitated when the liquid is cooled, and then seeded with fine-grained aluminium hydroxide. The water content of aluminium hydroxide is removed by a thermal treatment process at about 1100°C (the so-called calcination). The clean (in a technological sense) aluminium oxide is called alumina. In case of bauxites processed in Hungary, the production of each ton of alumina results in about 1,2-1,3 tons of (solid) bauxite residue (red mud).

Finally, in the so-called Hall-Heroult process cryolite (Na_3AlF_6) is added to the alumina to decrease its melting point, then aluminium is made out of this molten substance by electrolysis. This technology results in a 99 to 99.7% clean aluminium.

It is worth to mention that in Ajka Alumina Plant alumina production for metallurgical purposes added up to about 98% of the whole production in 1990, with the rest consisting of were non-metallurgic (special) products. As a result of intense development in non-metallurgic products (and due to the closure of the Hungarian aluminium furnaces) Ajka Alumina Plant has not produced alumina for metallurgical purposes since 2006.

6.2. Red mud storage methods

6.2.1. Red mud storage worldwide

Due to Bayer technology, red mud is produced practically everywhere in aluminium production. However, presently this by-product cannot be processed or recycled in an economic and efficient way. Therefore, red mud has been stored in different ways for about 120 years,[7] and in most countries only the concomitant solution, mainly alkali, is reused. The composition of bauxite and therefore of red mud depends on the source of the bauxite. Table 2 shows the composition of bauxite normally used in Ajka Alumina Plant, while Table 3 comprises the composition of red mud.

[7] Biggest Ever Red Mud Disaster in the World, Source: Index, 5 October 2010. http://index.hu/tudomany/kornyezet/2010/10/05/nem_volt_meg_a_vilagon_ekkora_vorosiszap-katasztrofa/

Composition	Characteristic percentage
Al_2O_3	15–19 %
Fe_2O_3	33–40 %
SiO_2	10–15 %
TiO_2	4–6 %
CaO	3–9 %
MgO	0,3–1,0 %
Na_2O_{fixed}	7–11 %
V_2O_5	0,2–0,4 %
P_2O_5	0,5–1,0 %
CO_2	2–3 %
SO_3	0.8–1.5 %
F	0.1–0.15 %
C	0.15–0.20 %
Heating loss	~ 9 %

Table 3: The characteristic composition of red mud[8]

The big alumina producer countries evidently have large red mud reservoirs. Utilisation and exploitation of red mud made all over the world adds up only to a few thousandths. There is no red mud utilisation or processing in Hungary, too. There are red mud storages in the country next to the closed down Mosonmagyaróvár Alumina Plant and near the Almásfüzitő Alumina Plant (also closed down) and by the still working Ajka Alumina Plant. (At the Mosonmagyaróvár Alumina Plant the so-called dry red mud storing was in use.)

The biggest challenge for every alumina producer is the proper red mud storage. Some countries, such as France, Greece and Japan, still dispose washed red mud slurry into the sea, saying that alkali contents of red slurry is neutralised by certain components of seawater. This solution is not allowed by EU laws, however, France has gained a permission for sea disposal until 2015. According to data provided by Red Mud Project[9] today only 7 out of the world's 84 alumina plants dispose red mud into the sea. The dissolved alkali (that is, in this case sodium hydroxide and sodium aluminate) contents of red mud is normally reduced by washing in every alumina plant. During this process, the concentration of dissolved sodium hydroxide and sodium aluminate is reduced to the thirtieth or fortieth part, to the fraction of the original value by "clean water" through a multi-stage counter-current washing procedure. The washed red mud can be treated by different filtering methods. Filtering by vacuum filters is the most common procedure. Through this process, the quantity of concomitant fluid of the bauxite residue (red mud) can be reduced to a great extent and, on the other hand, it equals to a washing of 2 or 3 stages.

[8] György Bánvölgyi: Failure of the embankment of a red mud pond in Hungary: The most serious accident of the Bayer process http://icsoba.org/images/Newsletter2011.pdf

[9] Red Mud> Disposal http://www.redmud.org/Disposal.html

Mainland storing technology depends on environmental conditions to some extent. Previously, only pumped diluted red mud was pumped out and it was left to thicken and dry by itself, however, without proper protection towards the subsoil, it could easily result in the contamination of the environment, particularly of the ground water. That is why reservoirs with double, membrane polymer and clay isolation are widespread, as this way toxic materials cannot leak out to the environment. During the thickening process, the alkaline fluid, which accumulates on the surface as a "surplus", is normally driven back to the alumina plant. Dry red mud storing which poses less environmental risk, is also becoming more and more common. The main principle of dry red mud storing technology is the dehydration of the red mud. There are two common methods to do this: one is thickening in special washing facilities and the other is filtration. For example, several Australian companies[10] reduce alkalinity of red mud down to pH 9 by a relatively new process using seawater. In the three alumina plants of the United States (in Texas and Louisiana)[11] they use more modern but expensive technology. It is a widespread drying method in the US to settle red mud and remove water from the surface continuously. According to experts, in the United States an industrial disaster similar to the one happened in Hungary cannot occur even in case of a breach in the dam, as the dry material could flow out. In the US, they also wash the red mud through several times in order to remove alkaline. In the Sherwin Alumina Plant in Gregory, Texas 80 percent of the red mud disposed to the reservoir is solid. According to American experts, red mud must be damp but not mud-like. If it was too dry, it could easily give off dust, so they spray it with water if necessary. The embankments of the reservoirs are checked at least two times a year and extreme weather conditions are also taken into consideration at planning. These reservoirs, for instance, could even stand up to Hurricane Katrina in 2005. Besides the USA, dry storing is also widespread in some Australian and Brazilian alumina plants.

In China, about 10 percent of the red mud is reused (however, it is not clear whether the so-called brown sludge derived from pyrogene technology is included here as well) they produce bricks out of it. In Japan, bauxite is enriched before the Bayer process in order to reduce the quantity of red mud produced at the end. In Greece, red mud was disposed into the sea until 2006, however, since then filtration through high pressure filters and dry storing technology have been introduced gradually.

6.2.2. Developments at MAL Co. Ltd. after the accident

MAL Co. Ltd. will introduce dry technology, which is prescribed in its new licence, in two stages. (Source: I_kotet_Tanulmany_pdf pages 40-42)

In the first stage, they add power plant gypsum to the 55% filtered red mud formed on the existing drum filters, counting 20-30% to wet material. The solid material contents of the mixture increases up to 60% which makes it transportable by lorries and spreadable at the storing place. By the effect of gypsum and natural drying it is expected to reach the required solidity of dry sludge in 2 or 3 weeks. This stage was put into operation at the end of February 2011.

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[10] Queensland Alumina Limited, Rio Tinto Alcan Gove alumina plant and Yarwun plant

[11] Safe sludge disposal is much more expensive; 11 October 2010; http://index.hu/kulfold/2010/10/11/az_amerikai_timfoldgyartokat_nem_ijesztene_meg_egy_gatszakadas/

In the second stage, red mud formed on the drum filters with 55s% solid density ratio would be filtered by newly set pressure filter thus a sludge with 65-70s% solid density ratio is made. This dry sludge can be transported by lorries and can be spread at the storing place and does not need further drying to become easily handled. They plan to add (a reduced quantity of) 17 % power plant gypsum to this sludge until studies cannot prove that a further reduction of gypsum ratio is possible, or even a technology without using gypsum can be realised. The planned deadline for putting this technology (which is regarded as final) into operation is 1 November 2011

The applied gypsum technology—as far as we know—has never been used before. The application of gypsum also changes the chemical structure of red mud, during the neutralisation process sodium sulphate is formed. However, there is an element of risk in the technology—as with any new invention.

Switching to the new dry technology cost HUF 500 million, while safety investments such as building embankments, clearing out canal belts, closing down the damaged Basin X, building water systems, neutralisation facilities and roads cost further HUF 1.5 billion.[12] According to the new licence the change of technology must be completed by the end of the test operation, during the test period fluid sludge will be disposed into Basin X/a. According to the licence[13] fluid red mud can be disposed into Basin X/a until 30 April 2011. Until 31 October 2011 dehydrated sludge with solid density ratio of 60% will be disposed, then, as of 1 November 2011 only the disposal of dehydrated sludge with solid density of 60-70% will be possible.

Filtered and gypsum treated red mud will be transported to the appointed Basin X,[14] mainly on an internal route by lorries, the new technology will increase delivery traffic by 4 or 5 lorries per hour. After switching to the dry red mud storing technology, the licence is valid for alumina production of 300.000 tons/year.

6.3. Red mud utilisation worldwide

According to some experts, the problem of the red mud produced continuously in enormous quantities all over the world can be solved the most reassuringly in the long term by the utilisation of red mud. Due to its metal contents, red mud can be regarded as secondary raw material. It contains iron in the biggest quantity. According to the Hungarian Academy of Sciences (MTA) the estimated the iron content[15] of about 50 million tons of red mud stored

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[12] Who will receive the mud-related Billions? 2011. február 10., http://index.hu/belfold/2011/02/10/minden_gattestbol_csurgalekviz_folyik/

[13] Announcement by the Central Transdanubian Inspectorate for Environmental Issues, Nature Conservation and Water Management: http://hirdetmeny.magyarorszag.hu/hirdetmeny?id=388860

[14] Sludge disaster: Green Authority says MAL may continue operations, conditionally; 22 January 2011 http://nol.hu/belfold/a_zoldhatosagi_szerint_feltetelekkel__de_mukodhet_a_mal

[15] Poisonous fang of red mud may be broken http://www.fn.hu/zold/20101008/kitorhetjuk_vorosiszap_meregfogat/

in Hungary (out of which 15 million tons is moisture content) is 15 to 18 million tons. Besides this, red mud contains vanadium, gallium, titanium and other rare earth metals[16] as well.

Practically, extraction of all the metals is possible in terms of technology, however, it is very expensive thus not profitable[17] in most cases. Utilisation of red mud with the present technology could only become profitable with much higher raw material rates and cheaper energy prices. In some countries bricks and other building materials are made out of the red mud without the extraction of any metals. As a trial, red mud is used in agriculture to improve the quality of soil.

Dr Katalin Gruiz, Reader of Budapest University Technology and Economics (BME) and Delegate of Hungary in the Committee for Risk Assessment of ECHA (European Chemicals Agency) compiled a list of the possible red mud utilisation opportunities:[18]

1. Utilisation in the construction industry as a building material

- Cement production
- Aggregate production
- Brick, block brick, building element production
- Geopolymers: aluminium silicate based geopolymers to replace cement: Si-O-Al-O-Si-O- structure

2. Usage in the chemical industry

- Catalysts (TiO_2 and Fe_2O_3 content, and for the large specific surface)
- Absorbents
- Ceramics
- Coating
- Plastics
- Pigment production

3. Environment technology

- Treatment of sewage and other waters
- Treatment of acidic mine waters
- Treatment of polluted soil
- Treatment of acidic smoke gases and end gases:
  SO_2 absorption in alkaline red mud for neutralisation purposes,
  CO_2 eabsorption in alkaline red mud: to neutralise carbonisation and improve solidity

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[16] **Rare earth metals in red mud (g/ton)** Berilium (5–18), Gallium (36–43), Nióbium (35–77), Molibdén (19–32), Szelén (11), Vanádium (490–730), Raterfordium (80–100), Thorium (45–50), Urán (32), Cirkon (340–540) (forrás: Kiss János: Ércteleptan. Tankönyvkiadó, Budapest, 1982.)

[17] Utilization of Red Mud for Soil Conditioner Manufacturing; 2010.10.25. http://www.kisalfold.hu/embargo/vorosiszap-hasznositas_talajjavito_eloallitasara/2185312/

[18] Red Mud Utilization http://www.mokkka.hu/drupal/node/7686

4. Usage in agriculture

- General soil supplement
- pH normalisation of soil
- Improve phosphorus content, phosphorus holdback
- To treat soil contamination

5. Metal industry, metal production

- Metal extraction from red mud
- Steel production
- Extraction of micro components

György Bánvölgyi and Tran Minh Huan summarised the most important red mud utilisation opportunities in 2009:[19]

- To improve acidic soil;
- Absorb heavy metals in soil;
- Keep nutrients such as phosphorus in agricultural soil;
- ceramics (tiles and floor tiles) production;
- brick production;
- road building; particularly the coarse fraction of red mud
- component in cement industry;
- additive material in iron metallurgy;
- filling material in tyre and plastics industry;
- pigment in paint production;
- absorption of CO_2 and SO_2 content of smoke gases
- raw material for absorbent and catalyst production
- raw material for chemicals to treat water and sewage water

Redmud.org made a compilation of the biggest red mud utilisation projects in the world.[20] According to 2004 estimations in China 10 % of the produced red mud was utilised for metal extraction or for brick production, although in this number the so-called brown sludge produced by plants using pyrogen technology might have been included. In Australia, there have been attempts to utilise red mud in the construction industry since the 80s. Alcoa's plant in Kwinana, West-Australia produces bricks from red mud and residential buildings have already been built out of these bricks. However, the usage of these materials for houses have triggered fierce debates as according to the Health Ministry the radiation of bricks made out of red mud exceeds the acceptable level for residential buildings.[21] Red mud is also utilised as a secondary raw material in Japan, it is mainly used in the cement industry as an additive.

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[19] http://icsoba.org/images/newsletter-09.pdf, György Bánvölgyi and Tran Minh Huan: De-watering, disposal and utilization of red mud: state of the art and emerging technologies

[20] Red Mud>Industrial Uses, http://www.redmud.org/Industrial_Uses.html

[21] Australian Fluoridation News Jan-Feb 2002 Edition, http://www.fluoridationfacts.com/ausfnews/marapr02/pollution_in_western.htm

There have been several attempts for red mud utilisation in Hungary too. György Dobos and Lajos Bartha invented the Dobos-Bartha process which aimed at the complex utilisation of red mud (iron extraction and cement production out of the remains). The process had reached the stage of half operational implementation by the early 70s, but after the oil price explosion it has not proved to be profitable. Ferenc Puskás conducted cultivation tests in Hungary and in India in the 80s and 90s on different plants and vegetables on artificial soil containing 50 % to 80 % red mud. Klára Bálint Egyedné and András Terpó have also done cultivation tests at the University of Horticulture. The Pannon University and the Agricultural College of Nyíregyháza have also studied the selection of plants able to grow on recultivated red mud surface. There are several Hungarian inventions for red mud utilisation. For example, Béla Venesz from Mosonmagyaróvár has invented eleven types of soil improving agents containing red mud and took out a patent on them.[22]

6.4. Similar major industrial accidents

There has never been a similar accident to the present catastrophe in the world. Wet red mud reservoirs usually damage the environment with a leakage towards the subsoil. We collected a few major Hungarian and international embankment accidents which caused water and soil contamination. Accidents of water reservoir dams which are more and less unknown for the Hungarian public have been compiled by tailings.info website: http://www.tailings.info/accidents.htm.

6.4.1. Disasters worldwide

The Buffalo Creek Flood: a Sludge Disaster

The sludge disaster known as the Buffalo Creek Flood can be compared the most to the Ajka red mud disaster in several respects. In February 1972 in Pittstone, North-Virginia of the United States the dam of a grey sludge reservoir of a mining company broke through due to the heavy rainfall for several days.[23] Similarly to the Ajka disaster here the sludge reservoir of a coal mine was built on a stream, the Buffalo Creek. It is interesting that the dams had been checked and claimed proper few days before the disaster just like in Ajka, although local residents discovered several cracks on the dam walls and warned the mine owners.

During the disaster 500.000 cubic meters (half a billion litres) grey sludge water rushed into 16 mining villages. The 4 to 6 meters high flood killed 125 people, seven people disap-

[22] http://www.origo.hu/itthon/20101007-nemzetkozi-jelentesek-nyilvantartottak-a-veszelyes-helyek-kozott-a-vorosiszap-tarozot.html

[23] The people responsible got away with a sludge spill 30 times tougher than the one in Ajka 06 October 2010 http://www.origo.hu/nagyvilag/20101006-buffalo-creeki-katasztrofa-egy-1972es-amerikai-iszapolmes-tanulsagai.html

peared, 502 houses were destroyed and further 943 houses were damaged. Property damage was estimated at USD 50 million. However, the company blamed everything on the weather, the heavy rains, several investigating committee claimed that the company had not met several safety and environmental regulations. Despite the facts the company has not been called to account for the disaster.

Dioxin poisoning in Seveso

On July 10, 1976 in Seveso, Italy, a chemical industrial accident happened in the factory of Icmesa, the affiliate company of Switzerland's Hoffmann-La Roche. 2 kilograms of dioxin (tetrachlorine-dibenzo-paradioxin—TCDD), one of the most dangerous industrial by-product leaked off the air.

193 people suffered serious damages and another 447 people had minor injuries due to the accidents, many faced long-term health problems. In the aftermath the frequency of genetic disorders increased which raised the developmental abnormalities ratio among newborn babies, and the number of spontaneous abortions grew by 20 percent. 600 people were evacuated after the poisoning which affected 37.000 people and polluted more than 2.500 hectares of land and vegetation, in addition 80.000 animals had to be slaughtered. After the contamination, soil change needed on a vast area. The management of the plant received 2.5 to 5-years prison sentence.[24]

The EU principles on the prevention of serious accidents related to dangerous chemicals was named after the Seveso accident.

A tragedy in Bhopal

On December 3, 1984 in Bhopal, India forty tons of methyl-isocyanate gas leaked out of the Union Carbide pesticide plant resulting in the world's worst industrial disaster. The leakage caused the immediate death of about 8.000 people and further 20.000 people died in a few years. About half a million people were affected by the pollution and more than 120.000 have suffered permanent damage. According to a study published in 2010[25] a significant level of contamination can be measured in the region of Bhopal even now. Most of the local women have no regular period as pesticides cause hormone related diseases.

Those who responsible for the chemical disaster were only prosecuted in 2010, twenty-five years after the disaster. Seven Indian employees of the Union Carbide were sentenced for two years in prison, however, the then CEO of the company, the American Warren Anderson is still at liberty and lives a luxury lifestyle in the USA.

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[24] Greatest industrial accidents of the past three decades http://www.origo.hu/tudomany/20101006-az-utobbi-harom-evtized-ipari-termelessel-osszefuggo-legnagyobb-katasztrofai.html

[25] New Tasks 25 Years after the Bhopal Tragedy http://vegyi.blog.hu/2009/12/03/uj_feladatok_25_evvel_a_bhopali_katasztrofa_utan

Oil disaster in the Gulf of Mexico

In April 2010, during the most serious ever industrial disaster in the history of the United States the British Petrol's Deepwater Horizon oil rig first exploded, then sank into the sea. They could not stop the oil spill for more than two months, thus an estimated 4.9 million barrels that is 780 million litres of crude oil gushed into the water of the Gulf of Mexico. The oil caused lasting damages to the marine habitats and to the coastal wildlife, however, the major part of the spill evaporated or dissolved. The moorland of the coast has been revitalised after a few months and less animals were killed than environmentalists feared.[26] Apart from this, the economical damages are significant. Previously, 90 percent of the fish consumption of the States had been caught in the Gulf of Mexico. Today oyster beds became extinct or on the verge of extinction, in addition, there is still a huge quantity of spilled crude oil on the sea-bed which can damage the whole food chain.

The accident of Prestige crude oil tanker

On November 14, 2002, the Bahamas-registered but Greek-owned Prestige tanker sprang a leak in a storm 50 kilometres far from the coast of Galicia, Spain.[27] The ship carried 77.000 tons of crude oil out of which 38.000 tons spilled into the sea. The spillage caused a vast ecological disaster, the oil covered the coasts of North of Spain and South of France 2.400 kilometres long. On the coast which was highly precious in terms of nature reserve, the carcasses of more than 35.000 birds and thousands of sea otters were washed ashore, and even more sank into the ocean. According to the subsequent surveys on the northern coast of Spain practically every marine habitat, even the migratory birds have been killed, despite the efforts of masses of volunteers who tried to clean the oil-covered animals. The damage was estimated at about EUR 1 billion, the soar of the unemployment rate only made things worse since 60 percent of the local people made their living by fishing.

6.4.2. Disasters in Hungary

It is hard to compare the 2010 red mud flood around Kolontár with the environmental pollution caused by Metallochemia plant near Nagytétény over a period of decades. According to the MTA Research Institute for Soil Science and Agricultural Chemistry it is difficult in an analytical sense as they were very different types (and happened with different chemicals). However, negligent industrial activity resulted in an extreme contamination of the environment in both cases

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[26] The extent of the red mud damage is not clear; 21. October 2010
http://ozonenetwork.hu/ozonenetwork/20101021-olajkatasztrofa-bp-kar-mexikoiobol-meg-nem-vilagos-mekkora-kart.html

[27] Spain: Tanker sinks; 20 November 2002
http://www.greenfo.hu/hirek/print_hirek_item.php?hir=2882&PHPSESSID=07ea8d058e7aaac679bc2b438101ef38

Basic differences between the two contamination cases:

	Nagytétény (Metallochemia)	Ajka - Kolontár (MAL Co. Ltd.)
Duration of contamination	Continuous environmental load (lasting several decades)	Instantaneous
Different thickness of (contaminated) soil	10 cm –> 1 m	3–5 cm
Partial differences in the nature of land use	Industrial and residential areas	Agricultural and residential areas
Geographical extent of the affected areas	20 ha polluting source (factory plant) size of land affected approx. ten times higher –> 600.000 – 800.000 m^3 soil	3500 ha –> 10 cm 3.500.000 m^3 soil 3 cm 1.050.000 m^3 soil
Different heavy metal pollution profile	Main pollutants: Pb, Zn, Cu, Ni, Cd	Main pollutants: As, Hg
Mercury (Hg)	11–32 mg/kg	1–17 mg/kg
Chromium (Cr)	52–670 mg/kg	14–134 mg/kg
Nickel (Ni)	44–50 mg/kg	7–67 mg/kg
Arsenic (As)	86 mg/kg	6–54 mg/kg

Soil has been replaced in about a thousand of private gardens in Nagytétény between 2004 and 2009. The region had been polluted by the Metallochemia factory for a century with different heavy metals—directly through the soil, the subsoil water and the smokestacks. Because of the slag products 800.000 cubic metres of field—80 hectares—has been spoiled and have to be replaced. A minor part of the material was used for the building of M6 motorway, and a waste hill was built out of the rest. As a first step, they piled up a hill of 300×300 metres basic area and insulated it with foil and felt. A layer of pebbles and arable land came on the top of that, and finally landscaping. The hill was equipped with an electric monitoring system of wire netting, too.

The 800.000 cubic metres land which was carried away from the residential area of Nagytétény had to be replaced. This was followed by the restoration of the vegetation of the gardens. The whole compensation project cost HUF 12 billion.

After the Ajka accident highly alkaline, caustic industrial waste spread out on about a 14-35 km^2 area. If an average 3 cm thick red mud spread out on a 35 km^2 area that means about 1 million m^3 soil. It could be the real contamination, however, there is no available technology for replacing soil in a thickness of 3 cm. If the upper 10 cm of the soil will be replaced that means 3.5 million m^3 soil has to be carried away and brought back.

At the Nagytétény contamination the main polluting heavy metals were: lead (Pb), zinc (Zn), brass (Cu), nickel (Ni), cadmium (Cd). Pb 65-1320 , Cd 1-26, Cu 121-1500, Zn 693-2828, Hg 11-32, Cr 52-670, Ni 44-50, Sn 340 and As showed 86 mg/kg ratio at some places in the upper layers of soil. Except of Ni these mean enormous enrichments compared to the normal or even to the acceptable values.

In the region of Kolontár arsenic (As) and mercury (Hg) were the most significant polluters. According to the studies As 6-54, Cr 14-134, Hg 1-17, Ni 7-67 and Pb 18-110 mg/kg toxic content of elements was found in the upper layer of soil contaminated with red mud.

To sum up, a smaller level of contamination was found in the Kolontár region compared to the one in Nagytétény (about 50-75%) (which is not surprising due to their different characters), however, the geographic area of the contamination is much larger.

The occurrence of heavy metals in a soil layer 0-10 cm deep around Nagytétény with cc. HNO_3 solution:

Sample ID	Cd	Cr	Cu	Ni	Pb	Zn
	mg/kg					
N-NE/NE	1,5–**2,6**	52–60	49–100	44	61–**112**	106–122
N-NW/SE	**2,8–3,3**	60	**127**	48	**196–898**	**264–755**
S-SE	**4,0–6,6**	54–64	**224–389**	43–46	**404–665**	**493–845**
SW/SE	**3,0–5,5**	58–60	46–**284**	47–49	65–**951**	121–**838**
E-SE/SE	**2,0–4,7**	52	22	40	70–**958**	87–**846**
SE/E	**6,1–7,2**	50–**106**	**271–581**	41–50	**1100–1321**	**1106–1244**

(Sources: Szabó, P. 1991. A talajok ólomszennyezettsége Nagytétény környékén.(Lead Pollution of Soil samples in the Nagytétény Area) - Agrokémia és Talajtan, 40: 297-302.; Kádár, I: A talaj-növény-állat-ember tápláléklánc szennyeződése kémiai elemekkel Magyarországon. (Pollution of the Soil-Plant-Animal-Human Food Chain by Chemical Elements in Hungary) - MTA TAKI, 1995)

The toxic element content of sediment samples from Kolontár after decomposition by aqua regia:

Sample ID	As	B	Ba	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Se	Sn	Zn
	mg/kg													
Vf3-004	5,67	4,30	42,7	0,129	3,69	14,0	5,80	**0,907**	0,5	7,36	17,5	< kh	< kh	20,8
Vf3-006	**25,9**	4,10	37,6	0,234	4,13	21,4	7,63	**2,26**	2,55	10,5	27,2	< kh	< kh	21,0
Vf3-008	**30,9**	17,4	120	0,378	9,28	33,4	20,1	**16,77**	4,39	20,8	110	**1,13**	2,39	71,3
Vf3-010	**53,9**	8,02	47,9	0,523	15,7	**134**	19,6	**1,04**	5,84	**67,1**	47,8	< kh	8,1	48,6
Vf3-012	**23,9**	7,46	46,8	0,235	4,66	18,7	9,34	**2,50**	2,03	11,9	29,6	< kh	1,50	42,6

(Source: MTA TAKI, "Studies on the Environmental Effects of the Red Mud Spillage in the Kolontár Region in 2010" Professional Report, 2011)

Comment: There are no suitable limit values related to the concentration of pollution in red mud or the in the sediment contaminated by red mud and in the contacting surface waters. To apply these values to the soil or the drinking water would be too strict and unprofessional.

CHINOIN cypermetrine contamination in Nagytétény

On May 26, 1998 at Chinoin's premises in Nagytétény during drawing off a *8 m^3 reactor 120 litres of CHINMIX 5EC spilled on the floor due to the failure.*[28] Chinmix 5 contains fluid beta-cypermethrine in a quantity of 5 g/l. This synthetic pyretroid insecticide is particularly dangerous to fish, thus is not allowed to use within 200 metres of the coast of surface waters.[29]

After the spillage, the workers washed the spilled insecticide down with water, but the workshop's 1.4 m^3 safety pool could not receive it so they pumped it out to the gutter in front of the workshop. They placed it on record but failed to inform the authorities. Next morning fishermen reported mass destruction of fish, the investigation started only after that in Chinoin. Pyretroid leaked into the Danube had caused a HUF 85 million damage and left Ercsi without drinking water for two days. It was fortunate that it did not cause bigger drinking water contamination as the pollution had not reached the water reserve of Budapest. The pollution could not reach the waters down in the river as cypermethrine dissolves relatively rapidly, its half-life is 27 hours.

The accident at Baia Mare and the cyanide contamination of the river Tisza

In January 2000, a cyanide pollution took place in Baia Mare, Romania, during the reexploitation of mine dumps. During the process cyanide technology was used to extract the remaining noble metals (gold, silver). This activity requires plenty of water, the washing waters with cyanide content get back to the system after settling. The embankment of the settling pond broke in a 30 metres section because of the high pressure and 100.000 to 120.000 m^3 sewage water highly polluted with heavy metals and cyanide got to the streams Zazar and Lápos and from there through the Szamos to the river Tisza causing a significant contamination on the Hungarian section of the river too. Since the main contractor had no plans for disaster management at all, efforts made to stop the spreading of the pollution were limited and inefficient. Although, there have been subsequent attempts to reduce the poisoning with the addition of sodium-hypochlorite but this then proved to be ineffective.

About a month after the first pollution a second significant contamination happened in Romania during the heavy metal and non-ferrous metal production and preparation for metallurgy. The embankment of the company's cleaning plant suddenly broke through due to the rapid melting of snow in March 2000, and about 20.000 m^3 sludge polluted with heavy metals spilled into the valley under the reservoir. Due to the continuous rainfall, this sludge was washed into the stream Novac from where the pollution reached the river Tisza through the river Visó. The pollution at this time reached the section of the Tisza above the river Szamos which was intact at the time of the cyanide pollution. On the evidence of the investigations

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[28] Dr. Ernő Fleit: A Hungarian Example of Industrial Accidents: Cypermethrin pollution at the CHINOIN plant in Nagytétény in 1998, Department of Sanitary and Environmental Engineering, BME
http://www.epito.bme.hu/vcst/oktatas/feltoltesek/BMEEOVKASH2/chinoin_2006_harom.ppt

[29] In the band not further than 1000m from the coast of lake Balaton

it can be stated that the polluted sludge contained lead, brass and zinc, mainly in a state of bonded to floating materials.[30]

Contamination by the waste incinerator of Dorog

On July 30, 2004 from the premises of a dangerous waste incinerator managed by Onyx Magyarország Kft toxic materials leaked off the gutters. According to local green organisations[31] dioxin and PCB contamination leaked into a canal which was connected to the stream Kenyérmezei and from there to the Danube. The polluting company reported the accident to the authorities with significant delay, then did not let the staff of the authorities immediately to the premises of the plant. In addition, the employees of the incinerator held back crucial information and the authorities were not fully aware of what kind of pollution is to be defended. The Committee of Defence of Esztergom passed a resolution with a significant delay on its meeting on August 5, 2004 about the prohibition of drinking water in Esztergom, Esztergom-Kertváros and Tokodaltáró thus residents could have drunk polluted water for several days.[32]

Onyx Magyarország Kft claimed that the applied closed technology excluded that the materials with PCB content leak out into the factory's precipitation channel system. The polluting material could only leak into the rainwater if someone poured a pail of PCB waste into the canal system with a provocative intent. So Onyx reported an unknown offender to the police. The environmental protection authority conducted investigations in the surface waters, but the tests did not prove toxic PCB and dioxin in the stream Kenyérmezei and in the Danube at Tát.[33]

An accredited laboratory Bálint Analitika took samples on July 28 out of the canal of the Dorog incinerator connecting to the stream Kenyérmezei and found dioxin and PCB compounds. The ratio of PCB compounds 400 times, the dioxins 100 times exceeded the limit.[34]

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[30] *Source:* http://www.terra.hu/cian/cian2.html

[31] Open letter of NGOs concerning the Danube pollution at Esztergom [2004. aug. 11. 14:53] http://www.gordiusz.hu/hirek/hirek_item.php?hir=8483

[32] Ministry of Environment and Water - Report for the Environmental Committee of Hungarian Parliament on the extraordinary event occurred at the Dorog Waste Incinerator run by ONYX Magyarország Kft. http://www.kvvm.hu/cimg/documents/Tajekoztato_Kornyezetvedelmi_Bizottsagi_ulesre_08.17.doc.

[33] http://www.bebte.hu/documents/kisduna.htm

[34] *Source:* Humusz, http://www.humusz.hu/hirek/rakkelto-anyagok-mergek-szivarognak-dorogi-egetobol/771

6.5. Environmental hazards, proposals of civil and green organisations in other countries

Alumina production in Brazil

Brazil is the third biggest bauxite producer of the world. There are several alumina plants in the Amazon region. These plants are permanently criticised by natives and civil organisations as their activity leads to deforestation, even if Alcoa Juruti's[35] plant proudly claims that it reforests its production areas. The related establishments such as aluminium refineries, ports and railway networks cause further environmental damage.

Many have been outraged by the fact that while the Norwegian government is the biggest sponsor of the Amazon Fund set up to protect the Amazon region, a Norwegian company has started to produce alumina and aluminium on the protectable lands and wants to provide electricity needed for aluminium production by a new giant hydroelectric power plant. Norway's Norsk Hydro ASA, the world's third biggest aluminium producer has recently bought up Brazil's Vale do Rio Doce company.[36] Local communities and civil organisations fear that the new development would lead to deforestation, contamination of the environment and relocation of the native people, that is endangers the life and health of the residents of the region.

Fears of red mud in Australia

According to civil organisations the alumina plant of Alcoa Pinjarra caused fluoride contamination which resulted in health problems.[37] On December 19, 2001 the daily West Australian called the region of Alcoa "cancer street" because of the numerous illnesses. The Pinjarra plant is one of the largest plants in the world with a production of 3.2 tons alumina a year. According to the leading toxicologist of the Ministry of Health the Pinjarra polluted the region with carcinogenic arsenic and polycyclic aromatic hydrocarbons. In 2001, more than 500 complaints were filed by residents because of the pollution of the plants in six months. The investigations revealed that the plant emitted 390 kilograms of fluoride a year into the air. Alcoa later acknowledged that contaminated water was leaking to the subsoil in its three West-Australian alumina plants.

In Australia they tried to utilise red mud mostly in the construction industry. Alcoa's plant in Kwinana, West-Australia started to produce bricks out of red mud, and residential building were built out of them.[38] The project was halted by the Australian Ministry of Health as

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[35] Brazil: The double role of Norway in conserving and destroying the Amazon By Chris Lang, 26th May 2010 http://www.alcoa.com/brazil/en/custom_page/environment_juruti.asp

[36] http://www.redd-monitor.org/2010/05/26/brazil-the-double-role-of-norway-in-conserving-and-destroying-the-amazon/

[37] FLUORIDE POLLUTION IN WESTERN AUSTRALIA http://www.fluoridationfacts.com/ausfnews/marapr02/pollution_in_western.htm

[38] http://www.redmud.org/Industrial_Uses.html, Australian Fluoridation News Jan-Feb 2002 Edition, http://www.fluoridationfacts.com/ausfnews/marapr02/pollution_in_western.htm

according to the tests, the building materials made out of red mud had a radiation level above the limits. The red mud contained radioactive thorium and uranium.

6.6. Compensation after industrial disasters all over the world

After the majority of the disasters restoration is made from public money as most countries lack the regulations which could guarantee that the polluter must have reserves for compensation, or which could force the compensation. Normally, only the fact of criminal offence is stated after the disasters. However, the European Union 2009 recommendation on environmental responsibility prescribes that the responsibility involves not only the clean-up of the spilled dangerous materials but the indirect damages caused to the flora and fauna, the land and water reserves and other areas, but in practice, as there is no mandatory funds for compensation, the companies cannot bear the costs of the damages.

Compensation after the cyanide disaster at the river Tisza

Hungarian rivers needed over 3 years until they could partially recover following the cyanide contamination from the settling pond of the waste dumps in Baia Mare. As a result of the cyanide pollution Hungary submitted a HUF 29.3 Billion claim against Romania, which included the damage to wildlife and the related rehabilitation costs. The Romanian state however transferred responsibility for the natural disaster to Aurul. The Hungarian State filed a lawsuit for the damage against Aurul in 2001 as it had failed to respond to the offer for out-of-court settlement. With reference to its own inspection, the Australian company refused to take responsibility for the disaster stating that the dam brake was brought about by circumstances outside their scope. In 2006, the Metropolitan Court stated in the interlocutory judgement that responsibility rested with Transgold, successor to Aurul. Later on, Transgold went into liquidation—it was bought by Romaltyn Mining, a corporation established by a British and a Kazakh company for approximately four million Euros. Since then the British company has resigned from the joint venture and the company became the property of Russia's gold producer Polyus Gold. *"This company is investing tens of millions of Euros to process gold and silver accumulated in a sludge storage in the proximity of Baia Mare as a result of extraction in the past decades, but this must comply with the requirements of the European Union (which states that cyanide content of the water in the sedimentation basin shall not exceed ten milligrams per litre.) The company had to make a 35 million Euro environmental investment by the end of 2010".*[39]

The lawsuit has not yet been closed, however, there is an increasing chance that, even in case of winning the suit, there won't be anybody left to recover the claim from.

[39] Cyanide spill in the river Tisza happened 11 years ago http://tiszakecske.blog.hu/2011/02/01/11_eve_omlott_cian_a_tiszaba

Sludge disaster in Buffalo Creek

When the dam of the Buffalo Creek coal slurry impoundment dam burst in 1972, the owner, Pittstone Mining Corporation didn't recognise its responsibility and blamed the days of heavy rainfall for the disaster.[40] Many review panels announced that the company had failed to comply with a number of provisions, yet it wasn't convicted: neither have they had to pay any penalty nor have the owners or the operators been held accountable.

The fact that the members of the West-Virginia committee investigating the case were all interested in coal mining or worked for authorities or government departments who would have been responsible for preventing the incident casts doubts on the objectivity of the investigation. In contrast, no representatives of the miners were placed in the committee. A committee set up by the victims stated that Pittstone is responsible for the tragedy, and that the authorities had defended the interests of mining companies and not of the people.[41]

After the disaster 750 homes were promised to be built but only 17 display houses and 90 flats were constructed, added to that latter were pulled up on a former waste-heap. The governor promised 10 recovery projects but only a fragment of them were completed. The damage was eliminated by the technical corps of the US Army instead of the company from 3,7 million Dollar worth of public founds. Total material damage was estimated at 50 million Dollars.[42] The West Virginia government filed a $ 100 million lawsuit against Pittston, but eventually compromised with the governor in compensation amounting to one million dollars. Victims of the disaster have initiated a number of suits against the company. The biggest joinder of 600 Parties claimed 64 million Dollars, but eventually received 13.5 million in an out-of-court settlement, which meant 13 thousand dollars per person after deducting the costs of litigation.

Compensation after the BP Deepwater Horizon accident

The oil contamination caused by an explosion on British Petrol oil platform named Deepwater Horizon was followed by compensation procedures and sues for damages. The US government promised to impose strict punishment on BP having been responsible for the pollution. BP immediately set up a 20 billion dollar compensation fund, which compensated for example local fishermen, although many American papers claim many have been waiting for their payment for over months. BP was estimated to have spent approximately 8 million Dollars on salvage since the oil platform explosion by the end of 2010.

In late 2010 the U.S. government sued BP for the oil disaster.[43] According to a law accepted in 1990, polluting water with oil might involve a 1100-dollar compensation per barrel, but it

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[40] The people responsible got away with a sludge spill 30 times tougher than the one in Ajka, 06 October 2010 http://www.origo.hu/nagyvilag/20101006-buffalo-creeki-katasztrofa-egy-1972es-amerikai-iszapolmes-tanulsagai.html

[41] http://wvgazette.com/static/series/buffalocreek/Commission/commission.html

[42] Disaster on Buffalo Creek, http://www.wvgazette.com/static/series/buffalocreek/commission.html

[43] American government sues BP for the oil disaster, 15 December 2010 http://www.origo.hu/nagyvilag/20101215-beperelte-az-amerikai-kormany-a-bpt-az-olajkatasztrofa-miatt.html

may multiply to 4300 Dollar per barrel if BP is condemned for culpable negligence or deliberateness.[44] Thus, the company might be required to pay a total of 5 billion-dollar compensation.

Summary

The Bayer process is globally the most widespread method of producing Aluminium. In practical terms, this technology leads to the formation of red mud wherever it is used. Currently, no economically viable and efficient solutions are available for the recovery of this material. It is most often deposited (dumping it in the sea or in reservoirs surrounded by dams).

Attempts have been made to find ways of recovering it: red mud is used both as a raw material or an additive e.g. in manufacturing bricks, road construction and soil improvement. Furthermore, the technology for extracting metals is feasible, but it is too costly).

In an international context, the trend is shifting away from wet disposal technologies towards dry disposal, which poses less risk. (The latter method was used in Mosonmagyaróvár until production was shut down there.) The alkalinity of the deposited slurry is typically lower internationally than it is in Hungary. On the other hand, the dry technology about to be introduced in Ajka, a technology which involves blending in power plant gypsum, has not yet been implemented at an industrial level anywhere.

The red mud disaster in Ajka is unparalleled in both its volume and its character. Nevertheless, at least part of the lessons learned from similar industrial accidents remain valid:

- The costs of remediation eventually are to be paid by the state, with the companies responsible for the accidents almost always backing out of the process to a greater or smaller extent,
- Compensation for damages only takes place in the long run, with both the range of individuals eventually receiving compensation and its extent much more limited than was originally promised,
- Personal and institutional responsibility is most rarely identified,
- The impact of environmental damage typically lasts longer than was originally estimated.

[44] Oil disaster: BP may be forced to pay USD 5 BN in penalties; 15 September 2010, http://www.hirextra.hu/2010/09/15/olajkatasztrofa-otmilliard-dollaros-karteritesre-kotelezhetik-a-bp-t/

Recommendations

In order to reduce the risk of similar incidents and to be able to manage the resulting damage, a common EU environmental emergency fund should be established, to be financed from payments by companies responsible for the risks.

Setting up such a fund and specifying the required level of financing calls for a review of similar industrial accidents and the subsequent compensation procedures. (As a typical example, the BP oil disaster in the Mexican Gulf required establishing a USD 20 Million compensation fund. This was made possible by the company's financial resources, however, as indicated above, the general rule is that there are no funds available to cover for damage and compensation.)

In the field of regulation and supervision, the factors enforcing the application of safer solutions posing less environmental risk should be strengthened.

Excavator levelling the broken dam wall.
This is the gap where the flood burst through.

7. Long-term effects, further necessary measures

7.1. Future of impacted areas

Following the rupture of the dam, the spilled sludge and the alkaline slurry contaminated an area of about 1000 hectares. The affected landmass, however, was even larger, as autumn floodings went on to spread out the slurry on lands not impacted in the October accident. According to data from the Central Agricultural Office (MgSzH), approximately 1000 hectares (based on March 2011 data, nearly 1300 hectares) of arable land was contaminated. According to the first surveys, 600 hectares will need soil replacement and mandatory special (limited) land use methods. The red mud cover can be considered 5-10 cm deep on average (min. 3 cm–max. 45 cm). The affected cultures included 300 ha of grassland, approx. 310 ha of prepared arable land, 30 ha alfalfa, 150 ha corn, 15 ha millet. In Vas county, the contaminated water stepping out of the Marcal riverbed flooded agricultural areas of significant size in the section bordered by Nemeskocs and route no. 8.

For the benefit of an accurate assessment of the damage, The Central Agricultural Office created an orthophoto map demonstrating the span of the red mud contamination. Besides this, in order to perform radioanalitical and heavy metal examinations, the institution took samples of grapes, carrots, lettuce and sunflower. These, however, are only suitable for assessing immediate and short-term impacts, providing little base for estimating long-term consequences.

One way of regenerating the arable lands and grasslands utilized as pastures is to neutralize the contaminants with dudarit and leave the clean-up of sludge residues up to biological processes. This is only conceivable where the red mud cover is thinner. In areas covered by thicker (greater than 5-10 centimetres) sludge layers, the only solution is to remove the red mud, though this results in damage to part of the topsoil and in turn, the degradation of the soil, as well. This is a sensitive loss on lands covered with less than average quality alluvial soil.

The pace of cleaning up the agricultural lands is slow. By the time of releasing the report, the sludge removal had only been completed on 50 hectares between Kolontár and Devecser while a 25 hectare area was treated and tilled in with dudarit.

Thus far, there is no reliable information available on what can be produced in the affected areas following the damage control. The production of food and feed crops definitely runs into obstacles, in part due to judicial, in part to market factors (a typical example is that in the wine region of Somló mountain, considered historic, wine tourism practically came to a halt to the news of the disaster, although the sludge did not physically reach the wine producing areas). It has been suggested that the production of energy crops could be the solution, but this solution equally raised expert concern since the toxic metals absorbed by the crops might be released into the atmosphere during the incineration of the biomass.

A further source of problems is the affectedness of hobby gardens and farmsteads in the vicinity of Devecser, Kolontár, Somlóvásárhely, Somlójenő, Tüskevár, Apácatorna and Kisberzseny. This is where soils and groundwater testing, as well as a continuous monitoring would be the most urgent, since without the ability to produce garden vegetables, the traditional lifestyle and livelihood of dwellers in these settlements are also at risk. **Besides rapidly carrying out investigations, the most important task would be to properly inform the residents and to organise a service providing consultation and advice. Agricultural work in the gardens starts as early as March, but without sufficient information, the residents will not be able to decide whether they should be concerned by the vegetables they have grown themselves, and to know what restrictions or security measures shall govern their traditional activities of production.** The production lost to a lack of information and legitimate precaution may lead to serious social and nutritional problems at the local level.

The third critical issue is the question of polluted riverbeds and riparian areas in the valleys of Torna Creek and Marcal River. Secondary damage control (removing the sludge deposited onto the banks) has already started in these areas. Nevertheless, the work advances illogically (dredging was begun at the mid section of the Marcal, entailing the risk of recontamination in the lower river section while carrying out the clean-up of the upper section later on).

7.2. Long-term health hazards

Hungarian experts, as well as the healthcare work group of WHO and the EU visiting Kolontár agreed that two significant sources of risks emerged following the accident. The health damaging effect of pollutants (arsenic and mercury above all) that have gotten into the soil and groundwater, must be taken into consideration. Arsenic can develop its toxicity mainly by appearing in dug wells and entering the food chain. Red mud escaped into the environment and deposited on the surface is a similarly important problem. The material truly acting sludge-like at the time of the accident, once dry, dusts off and can be carried by winds over a distance of several dozen kilometres. The dust of the red mud is alkaline itself, too, besides containing toxic elements as well (thus it is controversial that air pollution caused by red mud is compared to the general threshold for airborne dust, although only a fraction of the allowed dust concentration is permissible for carcinogenic materials under the legislation). Rough particulate matter of the alkaline dust has a caustic effect in the human organism when getting in contact with fluids. The fine particulates getting inside of the pulmonary alveoli also have a caustic effect and damage the thin tissues responsible for breathing. Experts state that no safe limit values can be set for the alkaline dust laden with toxic metals (safe limit values meaning such a load, under which the organism exposed to the harming effect does not suffer damage in any way).

Among the harmful health effects, one should also mention the psychological shock caused by the disaster, as well as the posttraumatic effects due to the fact that livelihoods have been put at peril.

7.3. Long-term environmental impacts

As noted above, most environmental problems may occur due to the toxic metals (arsenic, mercury, chromium, lead, nickel) gotten into the soil and waters, as well as due to the alkalinity of the slurry. **It is to be expected, that on the most severely damaged lands in the vicinity of the reservoir, no agricultural activity will be possible in the future; here afforestation may be the only method of utilization** (along with the same problems we have already mentioned in relation to the energy crops).

It should be noted at the same time that it is really difficult to determine the long-term environmental risks, since no similar accident has happened anywhere in the world. Based on data found in specialized literature, alkalinity of the red mud dust will diminish with time, due to exposure to the carbon dioxide content of the air. However, there is no reliable information available in what way the red mud spilled, still present in significant proportions in the environment will affect the natural flora and fauna of the region.

That is why **it is necessary to accurately measure the chemical composition of the contaminants at a sufficient number of locations,** specifying the oxidation stage of the metals, since for example while chromium(III) is not really toxic, chromium(VI) represents a serious health hazard. From the perspective of mitigation, the composition of the substances

is especially important, because whereas lye binds toxic metals, it can release them into the environment when exposed to acids, causing problems in the long run.

7.3.1. Long-term effects to the soil

Predicting prolonged effects is hindered by the fact that pollution caused by the red mud and its slurry escaped into the environment cannot be referenced to specific threshold data, since the contamination gradually mixes, dilutes in the soil. Solubility of toxic metals also varies with the change in alkalinity. While arsenic enters the aqueous phase more readily in an alkaline medium, multiple toxic metals are only mobilized in acidic media.

Greenpeace forecasts that in the long run, at least three other elements from the red mud spill in the Ajka region besides arsenic may pose prolonged environmental and health problems. The antimony, nickel and cadmium content of the contamination may be equally problematic to humans, animals and the environment – although from these only the concentration of the arsenic is considered to be at critical level. Located in Vienna, the Austrian Environment Agency (UBA) led research immediately following the accident detected 40 mg/kg value for the antimony that is classified as "potentially carcinogenic", three times the permitted limit in soils. The allergenic nickel count was 270 mg/kg, also a ratio above the threshold allowable in soils. The 7 mg/kg cadmium concentration could be below the threshold, but in the case of soils already laden with cadmium, for example due to using artificial fertilizers, it may still represent a concern. Cadmium is harmful to the reproductive and nervous systems.

It is important to note in regard to alkalinity and toxic metals that **according to the research done thus far, nowhere did the contamination penetrate deeper than 10 centimetres into the soils.** This relatively favourable circumstance for damage control can be explained with the structure of the red mud, especially its pore clogging characteristics.

7.3.2. Long-term effects to waters

To the surface water flows the alkaline slurry caused mainly short-term grievous environmental damage. The damaging effects of the slurry spread onto the floodplain and the sludge deposited in the riverbed have to be taken into consideration in multi-year perspective, too. Gypsum used to neutralize contaminants decreases the pH, promotes the deposition of the suspended red mud particles and bonds toxins to itself. Because of this (as well as due to the power plant gypsum potentially being further contaminated), the red mud mixed with gypsum, in some places of 50-70 cm thickness, has to be dredged from the beds of the Torna Creek, the Marcal River and to a smaller extent the Rába River.

A relatively small amount of acids used for neutralization got into rivers; this amount was diluted in the meantime and "went adrift", it does not take any further intervention.

Groundwater and drilled wells have to be tested on a continuous basis mainly for toxic metals and to detect water alkalinity. It can be expected that for the next few years or decades drilled wells of the region will only be suitable for irrigation, that is, even their use as drinking water for animals will be too risky.

7.4. Long-term effects of the measures taken

Detailed evaluation of administrative measures aimed for handling the mitigation of damages and of the consequences in the days following the accident, has not been done yet. **Experts generally agree that it has been beneficial to use acids and gypsum for neutralization, in order to protect the wildlife of more distant water bodies (Rába, Danube).** It occurred, at the same time, that larger amounts of these materials were also stored at locations closer to the site of the accident, this way the relief work could have been solved with less environmental pollution attributed to transportation.

During the time that has elapsed since the accident, the justifiability of the dam system construction began in the first days has not been proven. Many experts voiced doubts as to the necessity of the multi billion Forint investment. Furthermore, the decision to transport red mud and the contaminated soil from the relieved areas to the Ajka waste disposal site on public roads even though rail transportation capacity was also available can also be contested. This has resulted in damages done to residential buildings alongside the roads, to the roads themselves, and a significant dust and sound pollution accompanied by exhaust emissions, all of which would not have happened, had the railroad been used.

Following the disaster, the Central Agricultural Office prohibited the consumption of locally produced vegetables and fruits. Back then, this measure may have been justifiable for safety reasons and for lack of more detailed information. At the same time, the prohibitions on part the fodder crops, as well as local meat, milk and egg production need to be revised on a regular basis according to the results of the continuous measurements and examinations and they ought to be relaxed when necessary.

7.5. Official evaluations (by the authorities, the EU and the WHO)

The Hungarian authorities (the National Public Health and Medical Officer Service, the Central Agricultural Office, the Environmental Protection Inspectorate, Disaster Management) considered the efforts done to protect the population and the environment successful in their statements, despite the substantiated criticism on the part of NGOs. This event also supported the argument that in similar catastrophes the direct damage control, the damage relief and the settling of compensation cases are all fostered by continuous control by society, as well as the intensive dialogue among governmental and municipal authorities and NGOs.

The WHO team of experts evaluated damage control as effective mainly in terms of the mitigation of the longer term environmental impacts and preventing the spread of pollution to more distant water flows. The team of experts made noteworthy suggestions towards lowering the long-term environmental risks of the red mud reservoir. In addition, WHO recommended urgently carrying out an examination of the constituents of the sludge left in the reservoir and for assessing future risks, the organization considered it especially advisable to analyse the geohydrologic layer structure underneath the reservoir(s).

Similar to the WHO-experts, the EU-experts drew attention to the need for further measurements and analyses, indispensable for carrying out long-term measures. In their report they stated that drinking water quality is excellent, safe for human consumption. EU Experts called on Hungarian authorities to do everything in their power to prevent the contaminated alkaline water still seeping out of the reservoirs in large quantities from getting into the fresh waters.

7.6. Further necessary measures

7.6.1. Biomonitoring of the population

As the WHO reports also pointed out, **monitoring the health status of residents moving back into the area, as well as of those participating in the relief work will need to be continued in the future.** The organization recommended the assessment of possible mid- and long-term health effects as well, that might arise from direct contact with the sludge, from the potential contamination of locally produced food items and the drinking water. WHO found it necessary to create the local infrastructure for the targeted and regular screening of general health status, for reporting unexpected symptoms and their check-up, with special attention to the most sensitive groups of the population (in the meanwhile the government carried this out by establishing a screening and data collecting station). They suggested that the analytical capacity and the technical background of ÁNTSZ be improved, so that in similar situations it can react more effectively.

It makes analysis related to volatile dust particulates more difficult that there is no benchmark to compare the measured values to. There are only yearly and workplace related (8-hour) limit values—measurements typically approximate one thousandth of the latter value. Meanwhile, weekly patient turnover data is being collected from the family doctors of the region (in 19 districts). In comparison with the data from two weeks prior to the accident, an increase was experienced mostly in the frequency of complaints related to the respiratory system and the eye and mucous tissue, as well as a significant surge in the number of bronchitis cases.

7.6.2. Further necessary monitoring: water, dust, soil, groundwater

Within the air pollution measurements, emphasis should be placed on measuring volatile dust concentration and each more significant increase in pollution level has to be assessed, while the cause of the increase shall be eliminated. Further on, it is necessary to continuously measure the chemical composition of the soil, the groundwater, the wells and the surface waters. Test points need to be created in the centre of each built-up area and near the properties destroyed by the sludge spill. (It is worth noting here, that one of the two mobile air pollution measuring stations operating in Derecske was taken from Miskolc, thus significantly reducing the measuring capacity in a city with one of the worst air quality levels in the country.)

The ecotoxicological analysis of the spilled red mud has to be carried out by all means. Data available from previous times was collected when aluminium oxide was still exclusively produced in Hungary from domestic bauxite of known composition. The composition of the

present, partly imported raw material is however unknown. All what is clear is that half of the bauxite processed at Ajka is of domestic origin, the other half coming from Bosnia.

In the damaged agricultural areas there would be a need for a more detailed heavy metal analysis: to reveal in part the ecotoxicological, in part the biological effects of the contamination (presumably, the alkaline liquid destroyed a large portion of the organisms living in the soil).

An analysis conducted at the request of Benedek Jávor, the chair of the green committee in Parliament by the MTA TAKI Ecotoxicological Research Group in January 2011 repeatedly indicated high mercury and arsenic content. In addition it proved, thet concentration data merely with reference to individual contaminants are not sufficiently informative. **Ecotoxicological tests conducted with the indicator species (Daphnia magna) have demonstrated that the complex pollution has an impact on living organisms (as measured by the mortality rate) which is significantly higher than originally expected.**[1] Water analysis seems to constitute a task that is even more complex, among other things because besides the aforementioned toxic metals, the effect of the acids and gypsum used for neutralization, as well as the organic micro contaminants of the sedimentation need to be assessed (and in spring, as the ground thaws out, further contaminants can be expected to leach in). On top of all, the flood gushing through the built-in areas carried away huge amounts of pollutants of unknown composition (the contents of toilets and septic tanks, plant protection products, paints, used oil, etc.), thus the emergence of compounds of these can also be expected.

7.7. Risks of the continued operation

The continued operation of the Ajka plant and the red mud reservoirs also carries environmental risks. **The factory switches over to the dry deposition technology as of the beginning of March, nevertheless for a longer interim period they will mix gypsum to the deposited sludge in order to condense it. This solution has not yet been used anywhere; its environmental impacts are unknown.** The plan is to deposit the sludge cakes in Basin 10, but until its refill reaches the proper level, the dam shared by Basins 9 and 10 will not be supported from the Basin 10 side, which may result in its rupture. In Basins 9 and 10/A there is a certain amount of diluted slurry at present, too, and contaminated liquid seeps through the dams into the environment. The slurry wall surrounding the dams makes it harder for the leachate to get into the groundwater, at the same time it might contribute to a waterlogged condition in the footing of the dams some other parts, too. Gallium extraction remains to be associated with significant mercury contamination.

However, the main risk is represented by the fact that as long as the licensing and inspection practices of the authorities concerned do not change (we pointed out their faults in great detail above), **there is no institutional guarantee that technical or technological shortcomings potentially leading to further accidents will be revealed in time and the**

[1] How come there is mercury in the Torna creek?
http://lehetmas.hu/sajtokozlemenyek/11325/hogy-kerul-higany-a-torna-patakba/

necessary precautionary steps can be taken. As we have seen, in the reopening of the factory and during its operation, concerns related to keeping the market share and saving jobs had priority over environmental considerations, and it is not unlikely that this remains the case in the future as well.

Vegetation damaged in the spill needs to be replaced as well

8. Conclusion

The Kolontár red mud disaster was the greatest environmental crisis ever of the Central and Eastern European region. It was an accident that in terms of the presence of large amounts of accumulated contaminants often without a clearly identifiable owner, deficient regulations and insufficient control on the part of the authorities and civil society, could easily happen again in any of the countries of the region. This justified the preparation of an exhaustive report that would retrace the recent history of the company involved in the accident, MAL Co. Ltd. and the Hungarian aluminium industry, the process of privatization, the reasons for the accumulation of waste products like slurry and tailings, the technologies widely used for their treatment, would introduce the legal context, the practice of the authorities and all relevant factors which might help to understand events, draw the conclusions and identify the steps that can reduce the occurrence of similar accidents in the future.

The Baia Mare cyanide pollution in 2000 was the only environmental disaster of comparable dimensions in the region. At that time, it was the EU that provided assistance in collecting accurate information, clarifying the consequences, in damage control and the revision of regulations. That incident has exerted a strong influence on the development of European

environmental law, not in the least owing to the work done be the Baia Mare Task Force and the detailed and thorough documentation they prepared. Since the present case and objectives are of a similar nature, we thought it wise to follow the example set by the Task Force in preparing our study. Thus we set out to present how the differences in the legislation of Member States and the EU, the difficulties of applying the relevant regulations, and deficiencies in the legal framework and the work of authorities can lead to the similar accidents and what tasks the legislators should derive from the lessons of the recent disaster.

We think that most of the added value of the present report owes to the high level of uncertainty observed in the public opinion and at the political level regarding the disaster. Thus, there is need for a comprehensive study that will give an accurate image of the causes and extent of the pollution, the consequences to be reckoned with, and the legal, institutional, technological and financial conditions required to be met for damage limitation and prevention. As the manuscript of our report is being finalised, six months after the disaster, it is clear that neither the causes nor the environmental and health effects or the liability issues have been presented to the wider public in a lucid manner. No reliable information is available on establishments posing similar environmental risk; nobody knows if prevention and the remediation of damages should be the task of the state or the owners, and it is not clear which authorities should be inspecting slurry and tailings reservoirs. It is furthermore not widely known what existing technology should be used for neutralising industrial hazardous waste or its utilisation. These dilemmas are clearly explained by the study we aimed to prepare with investigative thoroughness, with references made to the relevant documents and with contributions by experts.

The most important finding of the report is that—though relevant Hungarian regulation in force still differs significantly from EU legislation—this accident would not have happened in this form and with such a severe impact, had all the authorities involved as well as the company adhered to existing regulations and carried out the tasks derived from the latter in the course of authorising and monitoring the reservoir at Ajka. The factors leading to the gravest results (excessive water content and alkalinity of the slurry in the reservoir, the sinking of the dam of the reservoir) can be traced back to omissions and faults in interpreting and applying the law which could, without a doubt, have been prevented. At the same time, politics also contributed to preparing the disaster by failing to include environmental guarantees in the privatization contracts, sabotaging the decision taken one and a half decades ago to work out policies of environmental liability insurance and by tolerating lax behaviour on the part of the authorities.

We put priority on elucidating the European dimensions of the case. We have presented how EU legislation deals with structures like red mud reservoirs, whether Hungarian environmental, construction and mining regulations comply in this respect with European rules (where is further need for legal harmonization) to what extent is the European legal framework suitable for managing environmental risk of such an order of magnitude, and where the law needs to be changed (both domestically and in the EU) to prevent disasters like the one in Kolontár and to alleviate efficient remediation should they nevertheless occur. We concluded that the Community acquis contains, for the most part, the provisions necessary for prevention, while the EU should exercise firmer behaviour regarding the implementation of the regulations concerned, as well as in controlling the proper management of the institutional

framework overseeing and enforcing regulations. Finally, the regulatory and financial background (including financial resources) for the rectification of the damage wrought should be established at the European level in the nearest future.

The report was edited by LMP's Sustainable Development Cabinet. Experts from Hungarian scientific institutions and NGOs who played a definitive part in investigating the accident (e.g. Greenpeace, Clean Air Action Group) as well as scholars of environmental law contributed to writing individual chapters. We organised two specialised conferences for initiating dialog among conflicting points of view and to find the consensus hoped for. We conducted several field trips at the disaster site, talked to the representatives of the residents of the affected areas, to the staff of national parks, officials of disaster management and the authorities concerned. All of this contributed to the preparation of a detailed document complete with quotations and references, verified several times scientifically, that experts, researchers, students and interested laymen can use as a reliable work of reference in the future both in Hungary and in other Member States. Finally, the report wishes to provide opportunities for decision makers to derive legislative and other tasks from the lessons of the disaster.

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Budapest, March 2011

JUDGMENT OF THE COURT (First Chamber)

26 May 2011 (*)

(Environment – Directive 2008/1/EC – Permit for the construction and operation of a power station – Directive 2001/81/EC – National emission ceilings for certain atmospheric pollutants – Power of the Member States during the transitional period – Direct effect)

In Joined Cases C-165/09 to C-167/09,

REFERENCES for a preliminary ruling under Article 234 EC from the Raad van State (Netherlands), made by decisions of 29 April 2009, received at the Court on 30 April 2009, in the proceedings

Stichting Natuur en Milieu (C-165/09),

Stichting Greenpeace Nederland,

Mr and Mrs B. Meijer,

E. Zwaag,

F. Pals

v

College van Gedeputeerde Staten van Groningen,

and

Stichting Natuur en Milieu (C-166/09),

Stichting Zuid-Hollandse Milieufederatie,

Stichting Greenpeace Nederland,

Vereniging van Verontruste Burgers van Voorne

v

College van Gedeputeerde Staten van Zuid-Holland,

and

Stichting Natuur en Milieu (C-167/09),

Stichting Zuid-Hollandse Milieufederatie,

Stichting Greenpeace Nederland,

Vereniging van Verontruste Burgers van Voorne

v

College van Gedeputeerde Staten van Zuid-Holland,

third parties:

RWE Eemshaven Holding BV, formerly RWE Power AG (C-165/09),

Electrabel Nederland NV (C-166/09),

College van Burgemeester en Wethouders Rotterdam (C-166/09 and C-167/09),

E.On Benelux NV (C-167/09),

THE COURT (First Chamber),

composed of A. Tizzano (Rapporteur), President of the Chamber, J.-J. Kasel, E. Levits, M. Safjan, and M. Berger, Judges,

Advocate General: J. Kokott,

Registrar: M. Ferreira, Principal Administrator,

having regard to the written procedure and further to the hearing on 14 October 2010,

after considering the observations submitted on behalf of:

– Stichting Natuur en Milieu, by J.G. Vollenbroek, acting as Agent,

– Stichting Greenpeace Nederland, by J.G. Vollenbroek, acting as Agent, and B.N. Kloostra, advocaat,

– Stichting Zuid-Hollandse Milieufederatie, by J.G. Vollenbroek, acting as Agent,

– the College van Gedeputeerde Staten van Groningen, by A. Ayal and W.J.W. Snippe, acting as Agents,

– the College van Gedeputeerde Staten van Zuid-Holland, by B.J.M. Verras, acting as Agent,

– RWE Eemshaven Holding BV, formerly RWE Power AG, by D.N. Broerse and J.J. Peelen, advocaten, and M. Werner, Rechtsanwalt,

– E.On Benelux NV, by J.M. Osse, J.C.A. Houdijk and A.A. Freriks, advocaten, and E. Broeren, Rechtsanwalt,

– Electrabel Nederland NV, by P. Wytinck, M. van der Woude and M.M. Kaajan, advocaten,

– the Netherlands Government, by C.M. Wissels, B. Koopman, A.M. de Ree, and Y. de Vries, acting as Agents,

– the Danish Government, by V. Pasternak Jørgensen, R. Holdgaard and C. Vang, acting as Agents,

– the French Government, by S. Menez, acting as Agent,

– the Italian Government, by G. Palmieri, acting as Agent, and S. Fiorentino, avvocato dello Stato,

– the Austrian Government, by E. Riedl, acting as Agent,

– the European Commission, by A. Alcover San Pedro and F. Ronkes Agerbeek, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 16 December 2010,

gives the following

Judgment

1 These references for a preliminary ruling concern the interpretation of Article 9 of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (OJ 1996 L 257, p. 26), in its original version and as codified by Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (OJ 2008 L 24, p. 8; 'the IPPC Directive'), and of the provisions that are relevant, in light of the circumstances of the disputes in the main proceedings, of Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants (OJ 2001 L 309, p. 22; 'the NEC Directive').

2 The references have been made in proceedings brought, as regards Case C-165/09, by the foundations Stichting Natuur en Milieu ('Natuur en Milieu') and Stichting Greenpeace Nederland ('Greenpeace') and by four natural persons against the College van Gedeputeerde Staten van Groningen (Provincial Executive of the Province of Groningen) concerning a decision by which the latter granted the company RWE Eemshaven Holding BV, formerly RWE Power AG ('RWE'), a permit for the construction and operation of a power station in the province of Groningen and, as regards Cases C-166/09 and C-167/09, by the foundations Natuur en Milieu, Stichting Zuid-Hollandse Milieufederatie ('Milieufederatie') and Greenpeace and the association Vereniging van Verontruste Burgers van Voorne (Association of Concerned Citizens of Voorne; 'the VVBV') against the College van Gedeputeerde Staten van Zuid-Holland (Provincial Executive of the Province of South Holland) concerning the decisions by which that authority granted the companies Electrabel Nederland N.V. ('Electrabel') and E.On Benelux N.V. ('E.On') respectively permits for the construction and operation of two power stations in the province of South Holland.

Legal context

European Union legislation

The IPPC Directive

3 As the IPPC Directive has codified and replaced Directive 96/61, the provisions of the latter will be set out below in their consolidated version, which does not result in their substantive alteration.

4 Recitals 3 and 9 in the preamble to the IPPC Directive state:

‘(3) The Fifth Environmental Action Programme … accorded priority to integrated pollution control as an important part of the move towards a more sustainable balance between human activity and socioeconomic development, on the one hand, and the resources and regenerative capacity of nature, on the other.

(9) The objective of an integrated approach to pollution control is to prevent emissions into air, water or soil wherever this is practicable, taking into account waste management, and, where it is not, to minimise them in order to achieve a high level of protection for the environment as a whole.’

5 Article 2(7) of the IPPC Directive defines ‘environmental quality standard’ as ‘the set of requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Community legislation’.

6 As stated in Article 2(12), ‘“best available techniques” means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole’.

7 Article 4 of the IPPC Directive provides:

‘Member States shall take the necessary measures to ensure that no new installation is operated without a permit issued in accordance with this Directive …’

8 Article 9 of the IPPC Directive provides:

‘1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 3 and 10 for the granting of permits in order to achieve a high level of protection for the environment as a whole by means of protection of the air, water and land.

…

3. The permit shall include emission limit values for polluting substances, in particular those listed in Annex III, likely to be emitted from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another (water, air and land). If necessary, the permit shall include appropriate requirements ensuring protection of the soil and ground water and measures concerning the management of waste generated by the installation. Where appropriate, limit values may be supplemented or replaced by equivalent parameters or technical measures.

…

4. Without prejudice to Article 10, the emission limit values and the equivalent parameters and technical measures referred to in paragraph 3 shall be based on the best available techniques, without prescribing the use of any technique or specific technology, but taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions. In all circumstances, the conditions of the permit shall contain provisions on the minimisation of long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole.

…

7. The permit may contain such other specific conditions for the purposes of this Directive as the Member State or competent authority may think fit.

8. Without prejudice to the obligation to implement a permit procedure pursuant to this Directive, Member States may prescribe certain requirements for certain categories of installations in general binding rules instead of including them in individual permit conditions, provided that an integrated approach and an equivalent high level of environmental protection as a whole are ensured.'

9 Article 10 of the IPPC Directive is worded as follows:

'Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall in particular be required in the permit, without prejudice to other measures which might be taken to comply with environmental quality standards.'

10 Article 19(2) of the IPPC Directive provides:

'In the absence of Community emission limit values defined pursuant to this Directive, the relevant emission limit values contained in the Directives listed in Annex II and in other Community legislation shall be applied as minimum emission limit values pursuant to this Directive for the installations listed in Annex I.'

11 Annex II to the IPPC Directive lists the following directives:

'1. Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos.

2. Council Directive 82/176/EEC of 22 March 1982 on limit values and quality objectives for mercury discharges by the chlor-alkali electrolysis industry.

3. Council Directive 83/513/EEC of 26 September 1983 on limit values and quality objectives for cadmium discharges.

4. Council Directive 84/156/EEC of 8 March 1984 on limit values and quality objectives for mercury discharges by sectors other than the chlor-alkali electrolysis industry.

5. Council Directive 84/491/EEC of 9 October 1984 on limit values and quality objectives for discharges of hexachlorocyclohexane.

6. Council Directive 86/280/EEC of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC.

7. Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste.

8. Council Directive 92/112/EEC of 15 December 1992 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.

9. Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the

limitation of emissions of certain pollutants into the air from large combustion plants.

10. Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

11. Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste.

12. Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils.

13. Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.

14. Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.'

The NEC Directive

12 Recitals 11 and 12 in the preamble to the NEC Directive state:

'(11) A set of national ceilings for each Member State for emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia is a cost-effective way of meeting interim environmental objectives. Such emission ceilings will allow the Community and the Member States flexibility in determining how to comply with them.

(12) Member States should be responsible for implementing measures to comply with national emission ceilings. It will be necessary to evaluate progress towards compliance with the emission ceilings. National programmes for the reduction of emissions should therefore be drawn up and reported on to the Commission and should include information on the measures adopted or envisaged to comply with the emission ceilings.'

13 Recital 19 in the preamble to the NEC Directive states as follows:

'The provisions of this Directive should apply without prejudice to the Community legislation regulating emissions of those pollutants from specific sources and to the provisions of [Directive 96/61] in relation to emission limit values and use of best available techniques.'

14 The aim of the NEC Directive, according to Article 1, is to limit emissions of acidifying and eutrophying pollutants and ozone precursors in order to improve the protection of the environment and human health against risks of adverse effects from acidification, soil eutrophication and ground-level ozone.

15 Article 4 of the NEC Directive, which is headed 'National emission ceilings', provides:

'1. By the year 2010 at the latest, Member States shall limit their annual national emissions of the pollutants sulphur dioxide (SO_2), nitrogen oxides (NO_x), volatile organic compounds (VOC) and ammonia (NH_3) to amounts not greater than the emission ceilings laid down in Annex I, taking into account any modifications made by Community measures adopted following the reports referred to in Article 9.

2. Member States shall ensure that the emission ceilings laid down in Annex I are not exceeded in any year after 2010.'

16 Article 6 of the NEC Directive states:

‘1. Member States shall, by 1 October 2002 at the latest, draw up programmes for the progressive reduction of national emissions of the pollutants referred to in Article 4 with the aim of complying at least with the national emission ceilings laid down in Annex I by 2010 at the latest.

2. The national programmes shall include information on adopted and envisaged policies and measures and quantified estimates of the effect of these policies and measures on emissions of the pollutants in 2010. Anticipated significant changes in the geographical distribution of national emissions shall be indicated.

3. Member States shall update and revise the national programmes as necessary by 1 October 2006.

4. Member States shall make available to the public and to appropriate organisations such as environmental organisations the programmes drawn up in accordance with paragraphs 1, 2 and 3. Information made available to the public and to organisations under this paragraph shall be clear, comprehensible and easily accessible.’

17 Article 7(1) and (2) of the NEC Directive is worded as follows:

‘1. Member States shall prepare and annually update national emission inventories and emission projections for 2010 for the pollutants referred to in Article 4.

2. Member States shall establish their emission inventories and projections using the methodologies specified in Annex III.’

18 Article 8(1) and (2) of the NEC Directive provides:

‘1. Member States shall each year, by 31 December at the latest, report their national emission inventories and their emission projections for 2010 established in accordance with Article 7 to the Commission and the European Environment Agency. They shall report their final emission inventories for the previous year but one and their provisional emission inventories for the previous year. Emission projections shall include information to enable a quantitative understanding of the key socioeconomic assumptions used in their preparation.

2. Member States shall, by 31 December 2002 at the latest, inform the Commission of the programmes drawn up in accordance with Article 6(1) and (2).

Member States shall, by 31 December 2006 at the latest, inform the Commission of the updated programmes drawn up in accordance with Article 6(3).’

19 Annex I to the NEC Directive lays down for the Kingdom of the Netherlands an emission ceiling of 50 kilotonnes of SO_2 and 260 kilotonnes of NO_x to be attained by 2010 at the latest.

National legislation

20 Directive 96/61 and the IPPC Directive have been transposed into domestic law by amending certain provisions of the Law on Environmental Management (Wet Milieubeheer; ‘the WMB’). Under Article 8.1(1)(b) of the WMB, it is prohibited, without a permit granted for that purpose, to modify an installation covered by Directive 96/61, and subsequently by the IPPC Directive, or to convert its

operation.

21 In particular, Article 8.10 of the WMB provides that a permit for the construction and operation of such an installation may be refused only in the interests of environmental protection. Article 8.10(2)(a) specifies in this regard that a permit is to be refused in any event if it cannot be ensured by its grant that the best available techniques will be applied in the installation in question.

22 As provided by Article 8.11(2) of the WMB, a permit may be granted subject to restrictions where the interests of environmental protection so require.

23 The Netherlands authorities have taken a number of steps and adopted several measures in order to implement and transpose the NEC Directive.

24 In accordance with Article 8(2) of that directive, in December 2002 the State Secretary for Housing, Spatial Planning and the Environment (Staatssecretaris van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer) drew up and notified to the Commission the report on the national programme relating to emission ceilings concerning acidification and large-scale air pollution ('Rapportage emissieplafonds verzuring en grootschalige luchtverontreiniging 2002'). In 2003, he drew up the implementing memorandum relating to the emission ceilings concerning acidification and large-scale air pollution ('Uitvoeringsnotitie emissieplafonds verzuring en grootschalige luchtverontreiniging 2003 Erop of eronder'), which sets out the measures envisaged and divides up the national emission ceilings on a sectoral basis.

25 On 6 July 2005 the Law of 16 June 2005 amending the Law on Air Pollution (implementation of the EC directive on national emission ceilings) (Wet van 16 juni 2005 tot wijziging van de Wet inzake de luchtverontreiniging (uitvoering EG-richtlijn nationale emissieplafonds)) and the Decree to implement the EC directive on national emission ceilings (Besluit uitvoering EG-richtlijn nationale emissieplafonds) entered into force.

26 In accordance with Article 8(2) of the NEC Directive, the national environmental-policy programme was revised and updated in 2006. For that purpose, the Minister for Housing, Spatial Planning and the Environment (Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer; 'the Minister') adopted a report on the emission ceilings concerning acidification and large-scale air pollution ('Uitvoeringsnotitie emissieplafonds verzuring en grootschalige luchtverontreiniging 2006'), which included a set of legal requirements, tax measures and binding agreements that was envisaged in order to comply by 31 December 2010 at the latest with the emission ceilings laid down for the Kingdom of the Netherlands.

27 On 28 June 2007 the Minister, acting upon the implementing memorandum relating to the emission ceilings concerning acidification and large-scale air pollution that had been drawn up by the State Secretary for Housing, Spatial Planning and the Environment, set the sectoral SO_2 emission ceiling for the energy sector at a total of 13.5 kilotonnes per year, without taking account of the bringing into operation of new power stations. A binding and enforceable memorandum of understanding on SO_2 was concluded on 26 June 2008 between the national authorities concerned, the provincial authorities (including those of South Holland and Groningen) and all the electricity companies, so that it would be obligatory for all the signatories to comply with this emission limit in the energy sector over a period extending until 31 December 2019.

28 In the context of the national emission ceiling for NO_x, on the other hand, the Netherlands authorities set up an emissions trading scheme, on the basis of a target of 55 kilotonnes of NO_x emissions in 2010

for their large industrial installations.

The main actions and the questions referred for a preliminary ruling

29 In Case C-165/09, by decision of 11 December 2007 the College van Gedeputeerde Staten van Groningen granted RWE a permit for the construction and operation of a power station fuelled by pulverised coal and biomass at Eemshaven, an industrial site in Eemsmond.

30 The total annual emissions from this installation, from its entry into operation envisaged in 2012 at the earliest, should amount to 1 454 tonnes of SO_2, which constitute roughly 2.9% of the national emission ceiling for this pollutant.

31 Natuur en Milieu, Greenpeace, Mr and Mrs Meijer, Mr Zwaag and Mr Pals brought an action challenging that decision before the Raad van State (Council of State).

32 In Case C-166/09, the College van Gedeputeerde Staten van Zuid-Holland granted a permit on 11 March 2008 for Electrabel's proposed construction and operation of a power station fuelled by pulverised coal and biomass on Missouriweg, Rotterdam.

33 This power station, which will not be brought into operation before 2013, should generate annual emissions amounting to 580 tonnes of SO_2 and 730 tonnes of NO_x, that is to say, 1.2% and 0.3% respectively of the national emission ceilings laid down for SO_2 and NO_x.

34 Natuur en Milieu, Milieufederatie, Greenpeace and the VVBV challenged the decision granting this permit before the Raad van State.

35 In Case C-167/09, by decision of 26 October 2007 the College van Gedeputeerde Staten van Zuid-Holland granted E.On a partial revision permit authorising a new installation, on Coloradoweg in the industrial area of Rotterdam, for the production of electricity by burning mainly coal.

36 The total annual emissions envisaged once the installation has been brought into operation, in 2012 at the earliest, should amount to 923 tonnes of SO_2 and 1 535 tonnes of NO_x, which respectively amount to 1.8% and 0.6% of the national emission ceilings for SO_2 and NO_x.

37 Natuur en Milieu, Milieufederatie, Greenpeace and the VVBV brought an action challenging that decision granting a permit before the Raad van State.

38 In those three actions, the applicants submitted in essence that, given the fact that the emission ceilings laid down for the Kingdom of the Netherlands by the NEC Directive would not be complied with at the end of 2010, the competent authorities should not have granted the permits or should, at least, have granted them subject to stricter conditions.

39 In its orders for reference, the Raad van State endorsed the proposition that, when the permits were granted, the policy and measures adopted were not sufficient to enable the Kingdom of the Netherlands to achieve by the end of 2010 the objective referred to in Article 4 of the NEC Directive.

40 Indeed, as was apparent in particular from the report drawn up by the Minister on the emission ceilings concerning acidification and large-scale air pollution, from the report drawn up by AEA Energy & Environment in 2008 on the evaluation of national plans submitted under the NEC Directive and from 'Environmental Balance 2008' ('Milieubalans 2008') adopted by the Planbureau voor de

Leefomgeving (Netherlands Environmental Assessment Agency), the national emission ceilings for SO_2 and NO_x would, according to the estimates, probably be exceeded in the Netherlands in 2010 without a change in policy.

41 Thus, in each of the main actions, the Raad van State was prompted to ponder over certain aspects of European Union law, in identical terms subject to the following provisos:

– in Case C-165/09, only the emission ceiling for SO_2 laid down by the NEC Directive is at issue, whereas Cases C-166/09 and C-167/09 also relate to the emission ceiling for NO_x that is referred to by that directive;

– given the time at which the facts in the main proceedings occurred, the first question referred for a preliminary ruling in Cases C-165/09 and C-167/09 relates to the interpretation of Article 9 of Directive 96/61, whilst in Case C-166/09 the first question refers to the same provision, the wording of which is unchanged, as codified by the IPPC Directive.

42 In those circumstances, the Raad van State decided to stay the proceedings and, in each of the three cases before it, to refer the following questions to the Court for a preliminary ruling:

‘1. Does the obligation of interpretation in conformity with directives imply that the obligations under Directive [96/61] (now [the IPPC Directive]) [(Cases C-165/09 and C-167/09)] [or] [the IPPC Directive] [(Case C-166/09)], as transposed in the [WMB], can and must be interpreted as meaning that, in deciding on an application for an environmental permit, the national emission ceiling for SO_2 [(Case C-165/09)] [or] the national emission ceilings for SO_2 and NO_x [(Cases C-166/09 and C-167/09)] in [the NEC Directive] must be fully taken into account, in particular as regards the obligations under Article 9(4) of [the IPPC Directive]?

2. (a) Does the duty of a Member State to refrain from taking measures liable seriously to compromise the attainment of the result prescribed by a directive also apply during the period of 27 November 2002 to 31 December 2010 envisaged in Article 4(1) of the NEC Directive?

(b) Do positive obligations rest with the Member State concerned during the relevant period of 27 November 2002 to 31 December 2010, either in parallel with the aforementioned duty to refrain or in place thereof, if the national emission ceiling for SO_2 and/or NO_x in the NEC Directive is exceeded, or if there is a risk that it may be exceeded, at the end of that period?

(c) In answering Questions 2(a) and 2(b), is it significant that an application for an environmental permit for an installation which contributes to the national emission ceiling for SO_2 and/or NO_x in the NEC Directive being exceeded or the risk of its being exceeded indicates that the installation will become operational in the year 2011 at the earliest?

3. (a) Do the obligations referred to in Question 2 mean that, in the absence of guarantees that the installation for which an environmental permit has been sought will not contribute to the national emission ceiling for SO_2 and/or NO_x in the NEC Directive being exceeded or the risk of its being exceeded, the Member State must refuse the application for the environmental permit or attach further conditions or restrictions to it? In answering that

question, is the extent to which the installation contributes to the emission ceiling being exceeded or the risk of its being exceeded of significance?

(b) Or does it follow from the NEC Directive that, even where the national emission ceiling for SO_2 and/or NO_x is exceeded or risks being exceeded, a Member State has the discretion to bring about the result prescribed by the directive not by refusing the permit or by making it subject to further conditions or restrictions, but rather by adopting other measures such as other forms of compensation?

4. Where obligations as referred to in Questions 2 and 3 rest with a Member State, can an individual bring the issue of compliance with those obligations before a national court?

5. (a) Can an individual rely directly on Article 4 of the NEC Directive?

(b) If so, is it possible to do so from 27 November 2002 or only from 31 December 2010? Is it significant, when answering that question, that the application for an environmental permit indicates that the installation will become operational in the year 2011 at the earliest?

6. More particularly, if the grant of an environmental permit and/or other measures contribute to the national emission ceiling for SO_2 and/or NO_x in the NEC Directive being exceeded or the risk of its being exceeded, is an individual entitled, on the basis of Article 4 of that directive:

(a) to make a general claim that the Member State concerned should adopt a package of measures which, by 2010 at the latest, would limit the annual national emissions of SO_2 and NO_x to amounts not greater than the national emission ceilings in the NEC Directive, or, if that does not succeed, a package of measures which would limit the emissions to those amounts as soon as possible thereafter;

(b) to make concrete claims that the Member State concerned should adopt specific measures in respect of an individual installation – for example, by refusing a permit or attaching further conditions or restrictions to the permit – which, by the year 2010 at the latest, would contribute to the annual national emissions of SO_2 and NO_x being limited to amounts not greater than the national emission ceilings in the NEC Directive, or, if that does not succeed, specific measures which would contribute to the emissions being limited to those amounts as soon as possible thereafter?

(c) In answering Questions 6(a) and 6(b), is the extent to which the installation contributes to the emission ceiling being exceeded or the risk of its being exceeded of significance?'

43 By order of the President of the Court of 24 June 2009, Cases C-165/09 to C-167/09 were joined for the purposes of the written and oral procedure and the judgment.

Admissibility

44 RWE, Electrabel and E.On contest the admissibility of the references for a preliminary ruling.

45 In particular, those companies submit, first, that inasmuch as the questions referred relate to interpretation of the provisions of the NEC Directive, they bear no relation to the subject-matter of the

main actions, which concern grant of an environmental permit under the national rules which have transposed the IPPC Directive into domestic law, and second, that the questions referred are hypothetical as the national programmes adopted enable the Kingdom of the Netherlands not to exceed, as at 31 December 2010, the emission ceilings laid down for SO_2 and NO_x.

46 E.On further submits that the Raad van State could have decided the main actions on the basis of existing well-established case-law that leaves no doubt as to the correct application of the European Union law concerned.

47 It should be recalled that, in accordance with settled case-law, in proceedings under Article 267 TFEU, which are based on a clear separation of functions between the national courts and the Court of Justice, the national court alone has jurisdiction to find and assess the facts in the case before it and to interpret and apply national law. Similarly, it is solely for the national court, before which the dispute has been brought and which must assume responsibility for the forthcoming judicial decision, to determine, in the light of the particular circumstances of the case, both the need for and the relevance of the questions which it submits to the Court. Consequently, where the questions submitted concern the interpretation of European Union law, the Court is in principle bound to give a ruling (see Case C-145/03 *Keller* [2005] ECR I-2529, paragraph 33; Case C-119/05 *Lucchini* [2007] ECR I-6199, paragraph 43; and Case C-11/07 *Eckelkamp and Others* [2008] ECR I-6845, paragraphs 27 and 32).

48 The Court is not bound to give a ruling, in particular, where it is quite obvious that the interpretation of European Union law that is sought bears no relation to the actual facts of the main action or its purpose or where the problem is hypothetical (see, to this effect, Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraph 39, and Case C-169/07 *Hartlauer* [2009] ECR I-1721, paragraph 25).

49 However, that is not the case in the present proceedings.

50 In the orders for reference, the Raad van State, first, is uncertain specifically as to whether the obligations flowing from the IPPC Directive, in particular from Article 9, require the competent national authorities to take account, when granting a permit under that directive ('environmental permit'), of the national SO_2 and NO_x ceilings laid down by the NEC Directive. Consequently, it cannot be maintained that the interpretation of the NEC Directive's provisions that is sought bears no relation to the subject-matter of the main proceedings.

51 Second, the Raad van State is unsure as to the scope of the obligations owed by the Member States under Article 4 of the NEC Directive and its other relevant provisions, in particular in situations where risks remain that Member States will not comply with the national SO_2 and NO_x ceilings laid down by that directive. Since the parties do not all agree upon the assessment of the technical information and scientific data which are referred to in this last respect by the Raad van State and such risks cannot be ruled out, it at any rate does not appear obvious that the questions referred are hypothetical in light of the decisions which the national court is called upon to make in the main actions.

52 Furthermore, as regards E.On's argument that the questions submitted in the present cases concern an interpretation of European Union law that follows fairly clearly from the Court's well-established case-law, it is to be remembered that Article 267 TFEU always allows a national court, if it considers it desirable, to refer questions of interpretation to the Court (see, to this effect, Joined Cases 28/62 to 30/62 *Da Costa and Others* [1963] ECR 31, 38; Case 283/81 *Cilfit and Others* [1982] ECR 3415, paragraph 15; and Case C-45/09 *Rosenbladt* [2010] ECR I-0000, paragraph 31).

53 Consequently, the references for a preliminary ruling must be considered admissible.

Substance

Preliminary remarks

54 In the orders for reference submitted to the Court, the Raad van State mentions both Directive 96/61 and the IPPC Directive, in light of the time material in the main proceedings.

55 However, inasmuch as the provisions of Article 9 of Directive 96/61 and of the IPPC Directive to which the first question relates have the same wording and must therefore be interpreted in the same way (see Case C-513/99 *Concordia Bus Finland* [2002] ECR I-7213, paragraph 91, and Case C-331/04 *ATI EAC e Viaggi di Maio and Others* [2005] ECR I-10109, paragraph 20), the Court can give a proper answer to the questions by referring only to the consolidated version of those provisions.

Question 1

56 By its first question, the Raad van State asks, in essence, whether Article 9(1), (3) and (4) of the IPPC Directive must be interpreted as meaning that, when granting an environmental permit for the construction and operation of an industrial installation, the competent national authorities are obliged to include among the conditions for grant of that permit the national emission ceilings for SO_2 and NO_x laid down by the NEC Directive.

57 It must be stated at the outset that, as all the Member States which have intervened in the present proceedings have also maintained, none of these paragraphs of Article 9 of the IPPC Directive refers, expressly or by implication, to those emission ceilings.

58 Article 9(1) of the IPPC Directive does not refer to the emission ceilings when it obliges Member States to ensure that the environmental permit includes all measures necessary for compliance with the requirements of Article 3 thereof. Article 3 in fact merely requires, first, that installations be operated in such a way that the appropriate preventive measures are adopted so that no significant pollution is caused, in particular through application of the best available techniques, and second, that waste production be avoided or limited in order to reduce the impact on the environment, that energy be used efficiently, and that the necessary measures be taken in order to prevent accidents or limit their consequences and also, upon definitive cessation of activities, in order to avoid any pollution risk and return the site of operation to a satisfactory state.

59 Nor does any reference result from Article 9(1) of the IPPC Directive, read in conjunction with Article 9(4), in so far as it requires the competent national authorities also to observe, where appropriate, the requirements of Article 10 for the granting of permits.

60 Article 10 of the IPPC Directive provides in particular that additional measures are to be required in the permit where ‘environmental quality standards’ require stricter conditions than those achievable by the use of the best available techniques.

61 It is apparent, however, from the wording of Article 2(7) of the IPPC Directive that those standards are rules laying down ‘requirements which must be fulfilled at a given time by a given environment or particular part thereof’ and are therefore linked to the qualitative characteristics of the elements protected.

62 As the Advocate General also has observed in point 63 of her Opinion, the national emission ceilings laid down by the NEC Directive do not involve such characteristics, since those ceilings refer to the total quantity of polluting substances that can be discharged into the atmosphere and not to specific qualitative requirements, relating to concentrations of polluting substances, that must be met at a given time by that particular medium.

63 Likewise, no reference to the emission ceilings in question results from Article 9(3) of the IPPC Directive. It is true that, under that provision, all environmental permits must include emission limit values for polluting substances, including SO_2 and NO_x, likely to be emitted from the installations concerned.

64 However, Article 19(2) of the IPPC Directive provides in this regard that, in the absence of Community emission limit values, it is the values contained 'in the Directives listed in Annex II and in other Community legislation' which are to be applied, as minimum emission limit values, for those installations.

65 The NEC Directive, first, is not among the directives listed in Annex II to the IPPC Directive. Second, inasmuch as it lays down national emission ceilings for pollutants discharged into the atmosphere by multiple unspecified sources and activities, the NEC Directive equally cannot be regarded as 'other Community legislation' containing emission limit values since the latter constitute, under Article 2 of the IPPC Directive, 'the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time … [that] normally apply at the point where the emissions leave the installation'.

66 Finally, Article 9(4) of the IPPC Directive contains no reference by implication to the ceilings mentioned in the NEC Directive. The first sentence of that provision merely states that the emission limit values must be based on application of the best available techniques, without prescribing the use of any technique or specific technology, but taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions.

67 Also, the obligation, laid down in the second sentence of Article 9(4) of the IPPC Directive, to see to it that the conditions of the permit contain provisions on the minimisation of long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole, can be interpreted only in the context of the system established by the IPPC Directive itself and in particular of the rule, set out in the first sentence of Article 9(4), under which it is mandatory for the emission limit values to be based on the best available techniques.

68 It should, moreover, be added that the IPPC Directive, which was adopted on the basis of Article 175(1) EC in order to achieve the objectives and implement the principles of the European Union's environment policy which are referred to in Article 174 EC, does not envisage complete harmonisation. In this context, the Member States retain the power, in accordance with Article 9(7) and (8) of the directive, to prescribe other specific – possibly more stringent – permit conditions, and to prescribe certain requirements for certain categories of installations in general binding rules provided that an integrated approach and an equivalent high level of environmental protection as a whole are ensured.

69 That having been explained, it must next be stated that equally no provision of the NEC Directive imposes obligations on the competent national authorities to regard the national emission ceilings for SO_2 and NO_x, when granting an environmental permit, as a condition for the permit.

70 On the contrary, the European Union legislature expressly stated, in recital 19 in its preamble, that the

NEC Directive should apply 'without prejudice to [the provisions of the IPPC Directive] in relation to emission limit values and use of best available techniques', thereby indicating that the obligations owed by the Member States under the NEC Directive cannot directly affect those flowing, inter alia, from Article 9 of the IPPC Directive.

71 This interpretation is borne out, finally, by the different purpose and the general scheme of both of the directives in question.

72 The objective of the IPPC Directive, as set out in essence in Article 1 thereof, is to achieve integrated prevention and control of pollution by the implementation of measures designed to prevent or, where that is not practicable, to reduce emissions, from the activities referred to there, in the air, water and land in order to achieve a high level of protection of the environment taken as a whole. That integrated approach is realised by appropriate coordination of the procedure and authorisation conditions for industrial installations whose potential for pollution is significant (see to this effect, in respect of Directive 96/61, Case C-473/07 *Association nationale pour la protection des eaux et rivières and OABA* [2009] ECR I-319, paragraphs 25 and 26).

73 For this purpose, as the Commission stated in its Communication of 21 December 2007 to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions – Towards an improved policy on industrial emissions (COM(2007) 843 final), the IPPC Directive establishes the principles for the permitting and control of large industrial installations based on an integrated approach and the application of best available techniques, which are the most effective techniques to achieve a high level of environmental protection, taking into account the costs and benefits.

74 On the other hand, the NEC Directive is intended, as follows from Articles 1 and 2 thereof, to limit emissions, produced by any source, of acidifying and eutrophying pollutants and ozone precursors in order to improve the protection of the environment and human health, with the long-term objective of not exceeding critical levels and loads.

75 Furthermore, as is clear from Article 4 of the NEC Directive and recitals 11 and 12 in its preamble, that directive is based on a purely programmatic approach under which the Member States enjoy wide flexibility as regards the choice of the policies and measures to be adopted or envisaged, within the framework of national programmes concerning all sources of pollution, in order progressively to achieve a structural reduction of emissions of inter alia SO_2 and NO_x to amounts not exceeding, at the end of 2010 at the latest, the emission ceilings laid down in Annex I to the directive. It follows that attainment of the objectives set by the directive cannot interfere directly in the procedures for grant of an environmental permit.

76 In light of all the foregoing considerations, the answer to the first question therefore is that Article 9(1), (3) and (4) of the IPPC Directive must be interpreted as meaning that, when granting an environmental permit for the construction and operation of an industrial installation, such as those at issue in the main actions, the Member States are not obliged to include among the conditions for grant of that permit the national emission ceilings for SO_2 and NO_x laid down by the NEC Directive, whilst they must comply with the obligation arising from the NEC Directive to adopt or envisage, within the framework of national programmes, appropriate and coherent policies and measures capable of reducing, as a whole, emissions of inter alia those pollutants to amounts not exceeding the ceilings laid down in Annex I to that directive by the end of 2010 at the latest.

Questions 2 and 3

77 By its second and third questions, which it is appropriate to examine together, the national court asks in essence, first, what obligations are owed by the Member States under the NEC Directive during the period between 27 November 2002, when the time-limit for its transposition expired, and 31 December 2010, the deadline after which the Member States must comply with the emission ceilings laid down by it. Second, the national court is uncertain whether, in light of those obligations, the competent national authorities might be obliged to refuse or to attach restrictions to the grant of an environmental permit, or to adopt specific compensatory measures, where the national emission ceilings for SO_2 and NO_x under the NEC Directive are exceeded or risk being exceeded.

Obligation to refrain from taking any measures liable seriously to compromise the attainment of the result prescribed by a directive

78 First of all, it is to be remembered that it is settled case-law that, during the period prescribed for transposition of a directive, the Member States to which it is addressed must refrain from taking any measures liable seriously to compromise the attainment of the result prescribed by that directive (Case C-129/96 *Inter-Environnement Wallonie* [1997] ECR I-7411, paragraph 45; Case C-14/02 *ATRAL* [2003] ECR I-4431, paragraph 58; and Joined Cases C-261/07 and C-299/07 *VTB-VAB and Galatea* [2009] ECR I-2949, paragraph 38). Such an obligation to refrain owed by all the national authorities (see Case C-212/04 *Adeneler and Others* [2006] ECR I-6057, paragraph 122 and the case-law cited) must be understood as referring to the adoption of any measure, general or specific, liable to produce such a compromising effect.

79 This obligation to refrain from taking measures is also owed by the Member States, by virtue of the application of Article 4(3) TEU in conjunction with the third paragraph of Article 288 TFEU, during a transitional period in which they are authorised to continue to apply their national systems, even though those systems do not comply with the directive in question (see Case C-316/04 *Stichting Zuid-Hollandse Milieufederatie* [2005] ECR I-9759, paragraph 42, and Case C-138/05 *Stichting Zuid-Hollandse Milieufederatie* [2006] ECR I-8339, paragraph 42).

80 It therefore follows that such an obligation is also to be complied with in the transitional period provided for in Article 4 of the NEC Directive, during which the Member States are authorised not to comply for the time being with the annual national emission quantities laid down in Annex I to that directive. It is for the national court to review whether this obligation has been complied with in the light of the provisions and measures whose legality it is called upon to examine (see, to this effect, *Inter-Environnement Wallonie*, paragraph 46).

81 Nevertheless, such a review must necessarily be conducted on the basis of an overall assessment, taking account of all the policies and measures adopted in the national territory concerned.

82 Having regard to the system established by the NEC Directive and, in particular, to the programmatic approach, as noted in paragraph 75 of the present judgment, for which it provides, attainment of the result prescribed by that directive can be seriously impeded by the Member States only by the adoption and implementation of a body of policies and measures which, given, in particular, their effects in practice and their duration in time, allow or give rise to a critical situation in light of the total quantity of emissions discharged into the atmosphere by all sources of pollution, such as necessarily to compromise compliance, at the end of 2010, with the ceilings laid down in Annex I to the directive (see, by analogy, *Inter-Environnement Wallonie*, paragraphs 47 and 49).

83 It follows that a simple specific measure relating to a single source of SO_2 and NO_x, consisting in the decision to grant an environmental permit for the construction and operation of an industrial installation,

does not appear liable, in itself, seriously to compromise the result prescribed by the NEC Directive, namely limiting emissions from those sources of pollution into the atmosphere to annual total amounts not exceeding the national ceilings in 2010 at the latest. This conclusion applies all the more where, in circumstances such as those in the main actions, the installation in question is not to be brought into operation until 2012 at the earliest.

Positive obligations owed by the Member States during the transitional period from 27 November 2002 to 31 December 2010

84 With regard to the question of whether and, if so, what positive obligations are owed by the Member States during the transitional period from 27 November 2002 to 31 December 2010, it should be recalled that, in accordance with settled case-law, the obligation of a Member State to take all the measures necessary to achieve the result prescribed by a directive is a binding obligation imposed by the third paragraph of Article 288 TFEU and by the directive itself (Case 152/84 *Marshall* [1986] ECR 723, paragraph 48; Case 72/95 *Kraaijeveld and Others* [1996] ECR I-5403, paragraph 55; and *Inter-Environnement Wallonie*, paragraph 40).

85 It follows from that obligation that, during the period prescribed for transposition, the Member States must take the measures necessary to ensure that the result prescribed by the directive is achieved at the end of that period (*Inter-Environnement Wallonie*, paragraph 44). The same is true as regards a transitional period, such as the period provided for in Article 4 of the NEC Directive.

86 It should be noted that the NEC Directive itself lays down certain positive obligations on the Member States during that period, concerning in particular the establishment of overall action strategies with the aim of progressively reducing annual emissions of the pollutants concerned, by the end of 2010 at the latest, to amounts not exceeding the ceilings laid down by Annex I to the directive.

87 More specifically, under Articles 6 and 8(2) of the NEC Directive, the Member States must draw up by 1 October 2002 at the latest, and then update and revise as necessary by 1 October 2006 at the latest, programmes for the progressive reduction of the emissions in question, which they are obliged to make available to the public and appropriate organisations by means of clear, comprehensible and easily accessible information, and to notify to the Commission within the time-limit prescribed. Articles 7(1) and (2) and 8(1) of the NEC Directive also oblige the Member States to prepare and annually update national inventories of those emissions and national emission projections for 2010. The final emission inventories for the previous year but one and the provisional emission inventories for the previous year, as well as the national emission projections for 2010, must be reported to the Commission and the European Environment Agency each year, by 31 December at the latest (see, to this effect, the judgment of 18 December 2008 in Case C-273/08 *Commission* v *Luxembourg*, not published in the ECR, paragraphs 2 and 11).

88 As regards the specific content of those national programmes, it must nevertheless be found that, as noted in paragraph 75 of the present judgment, the wide flexibility accorded to the Member States by the NEC Directive prevents limits from being placed upon them in the development of the programmes and their thus being obliged to adopt or to refrain from adopting specific measures or initiatives for reasons extraneous to assessments of a strategic nature which take account globally of the factual circumstances and the various competing public and private interests.

89 The imposition of any requirements to that effect would run counter to the intention of the European Union legislature, whose aim in particular is to allow the Member States to strike a certain balance between the various interests involved. Furthermore, that would result in excessive constraints being

placed on the Member States and would, accordingly, be contrary to the principle of proportionality, laid down in Article 5 TEU and expressly borne in mind in recital 13 in the preamble to the NEC Directive, which requires that the means deployed by a provision of European Union law be appropriate for attaining the legitimate objectives pursued by the legislation at issue and must not go beyond what is necessary to achieve them (see Joined Cases C-453/03, C-11/04, C-12/04 and C-194/04 *ABNA and Others* [2005] ECR I-10423, paragraph 68 and the case-law cited, and Case C-58/08 *Vodafone and Others* [2010] ECR I-0000, paragraph 51).

90 It accordingly follows that, during the transitional period from 27 November 2002 to 31 December 2010, the third paragraph of Article 288 TFEU and the NEC Directive itself do not require the Member States to refuse or to attach restrictions to the grant of an environmental permit such as those at issue in the main actions, or to adopt specific compensatory measures for each permit granted of that kind, even where the national emission ceilings for SO_2 and NO_x are exceeded or risk being exceeded.

91 In light of all the foregoing reasoning, the answer to the second and third questions is that during the transitional period from 27 November 2002 to 31 December 2010, provided for in Article 4 of the NEC Directive:

– Article 4(3) TEU, the third paragraph of Article 288 TFEU and the NEC Directive require the Member States to refrain from adopting any measures liable seriously to compromise the attainment of the result prescribed by that directive;

– adoption by the Member States of a specific measure relating to a single source of SO_2 and NO_x does not appear liable, in itself, seriously to compromise the attainment of the result prescribed by the NEC Directive. It is for the national court to review whether that is true of each of the decisions granting an environmental permit for the construction and operation of an industrial installation such as the permits at issue in the main actions;

– the third paragraph of Article 288 TFEU and Articles 6, 7(1) and (2) and 8(1) and (2) of the NEC Directive require the Member States, first, to draw up, to update and to revise as necessary programmes for the progressive reduction of national SO_2 and NO_x emissions, which they are obliged to make available to the public and appropriate organisations by means of clear, comprehensible and easily accessible information, and to notify to the Commission within the time-limit prescribed, and second, to prepare and annually update national inventories of those emissions and national emission projections for 2010, which they must report to the Commission and the European Environment Agency within the time-limit prescribed;

– the third paragraph of Article 288 TFEU and the NEC Directive itself do not require the Member States to refuse or to attach restrictions to the grant of an environmental permit for the construction and operation of an industrial installation such as the permits at issue in the main actions, or to adopt specific compensatory measures for each permit granted of that kind, even where the national emission ceilings for SO_2 and NO_x are exceeded or risk being exceeded.

Questions 4 to 6

92 By its fourth, fifth and sixth questions, which it is appropriate to examine together, the national court asks in essence whether and, if so, to what extent an individual can rely directly before the national courts upon the obligations imposed by Articles 4 and 6 of the NEC Directive.

93 It is to be recalled at the outset that it is settled case-law that, whenever provisions of a directive

appear, so far as their subject-matter is concerned, to be unconditional and sufficiently precise, they may be relied upon by individuals against the Member State where the latter has failed to implement the directive in domestic law by the end of the period prescribed or where it has failed to implement the directive correctly (see, inter alia, Joined Cases C-6/90 and C-9/90 *Francovich and Others* [1991] ECR I-5357, paragraph 11; Case C-62/00 *Marks & Spencer* [2002] ECR I-6325, paragraph 25; and Joined Cases C-397/01 to C-403/01 *Pfeiffer and Others* [2004] ECR I-8835, paragraph 103).

94 As the Court of Justice has pointed out on numerous occasions, it would be incompatible with the binding effect which the third paragraph of Article 288 TFEU ascribes to a directive to exclude, in principle, the possibility of the obligation imposed by a directive being relied on by persons concerned. That consideration applies particularly in respect of a directive whose objective is to control and reduce atmospheric pollution and which is designed, therefore, to protect public health (see Case C-237/07 *Janecek* [2008] ECR I-6221, paragraph 37).

95 It should nevertheless be noted in this regard that a provision of European Union law is unconditional where it sets forth an obligation which is not qualified by any condition, or subject, in its implementation or effects, to the taking of any measure either by the institutions of the European Union or by the Member States (see, inter alia, Case 28/67 *Molkerei-Zentrale Westfalen/Lippe* [1968] ECR 143 and Case C-236/92 *Comitato di coordinamento per la difesa della cava and Others* [1994] ECR I-483, paragraph 9).

96 It is clear that Article 4 of the NEC Directive does not display the characteristics set out above.

97 Viewed in its context, that article is purely programmatic in nature, in that it merely lays down an objective to be attained, leaving the Member States wide flexibility as to the means to be employed in order to reach that objective.

98 It follows that, since it does not lay down any unconditional and sufficiently precise obligation requiring the adoption of specific individual policies or measures intended to enable the result prescribed to be achieved, individuals cannot rely directly before a national court upon Article 4 of the NEC Directive to claim, before 31 December 2010, that the competent authorities should refuse, or attach restrictions when deciding to grant, an environmental permit such as those at issue in the main actions, or should adopt specific compensatory measures following the grant of such a permit.

99 On the other hand, Article 6 of the NEC Directive is unconditional and sufficiently precise in that it requires the Member States in unequivocal terms, first, under Article 6(1) and (3), to draw up national programmes for the progressive reduction of national emissions of inter alia SO_2 and NO_x in order to comply with the ceilings laid down in Annex I to the directive by the end of 2010 at the latest and, second, as provided in Article 6(4), to make those programmes available to the public and to appropriate organisations such as environmental organisations by means of clear, comprehensible and easily accessible information.

100 It follows that the natural and legal persons directly concerned must be able to require the competent authorities, if necessary by bringing the matter before the national courts, to observe and implement such rules of European Union law.

101 As to the content of the programmes that must be drawn up, it is true that, as follows from paragraph 88 of the present judgment, the Member States have wide flexibility in selecting the specific initiatives to be implemented, whilst it is also true that they are not obliged to adopt policies and measures to ensure that ceilings are not exceeded before the end of 2010.

102 It is apparent, however, from Article 6 of the NEC Directive and from the scheme of that directive, which seeks a progressive reduction of national emissions of the pollutants expressly referred to, that the Member States have the task, during the transitional period from 27 November 2002 to 31 December 2010, of adopting or envisaging appropriate and coherent policies and measures capable of reducing, as a whole, emissions of those pollutants so as to comply with the national ceilings laid down in Annex I to the directive.

103 Whilst the Member States thus have a discretion, Article 6 of the NEC Directive nevertheless involves limits on its exercise, which are capable of being relied upon before the national courts, relating to the appropriateness of the body of policies and measures adopted or envisaged within the framework of the respective national programmes to the objective of limiting, by the end of 2010 at the latest, emissions of the pollutants covered to amounts not exceeding the ceilings laid down for each Member State (see, to this effect, *Janecek*, paragraph 46).

104 In light of the foregoing considerations, the answer to the fourth, fifth and sixth questions therefore is as follows:

– Article 4 of the NEC Directive is not unconditional and sufficiently precise for individuals to be able to rely upon it before the national courts before 31 December 2010.

– Article 6 of the NEC Directive grants rights to individuals directly concerned which can be relied upon before the national courts in order to claim that, during the transitional period from 27 November 2002 to 31 December 2010, the Member States should adopt or envisage, within the framework of national programmes, appropriate and coherent policies and measures capable of reducing, as a whole, emissions of the pollutants covered so as to comply with the national ceilings laid down in Annex I to that directive by the end of 2010 at the latest, and should make the programmes drawn up for those purposes available to the public and appropriate organisations by means of clear, comprehensible and easily accessible information.

Costs

105 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (First Chamber) hereby rules:

1. **Article 9(1), (3) and (4) of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, in its original version and as codified by Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, must be interpreted as meaning that, when granting an environmental permit for the construction and operation of an industrial installation, such as those at issue in the main actions, the Member States are not obliged to include among the conditions for grant of that permit the national emission ceilings for SO_2 and NO_x laid down by Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants, whilst they must comply with the obligation arising from Directive 2001/81 to adopt or envisage, within the framework of national programmes,**

appropriate and coherent policies and measures capable of reducing, as a whole, emissions of inter alia those pollutants to amounts not exceeding the ceilings laid down in Annex I to that directive by the end of 2010 at the latest.

2. During the transitional period from 27 November 2002 to 31 December 2010, provided for in Article 4 of Directive 2001/81:

– **Article 4(3) TEU, the third paragraph of Article 288 TFEU and Directive 2001/81 require the Member States to refrain from adopting any measures liable seriously to compromise the attainment of the result prescribed by that directive;**

– **adoption by the Member States of a specific measure relating to a single source of SO_2 and NO_x does not appear liable, in itself, seriously to compromise the attainment of the result prescribed by Directive 2001/81. It is for the national court to review whether that is true of each of the decisions granting an environmental permit for the construction and operation of an industrial installation such as the permits at issue in the main actions;**

– **the third paragraph of Article 288 TFEU and Articles 6, 7(1) and (2) and 8(1) and (2) of Directive 2001/81 require the Member States, first, to draw up, to update and to revise as necessary programmes for the progressive reduction of national SO_2 and NO_x emissions, which they are obliged to make available to the public and appropriate organisations by means of clear, comprehensible and easily accessible information, and to notify to the European Commission within the time-limit prescribed, and second, to prepare and annually update national inventories of those emissions and national emission projections for 2010, which they must report to the European Commission and the European Environment Agency within the time-limit prescribed;**

– **the third paragraph of Article 288 TFEU and Directive 2001/81 itself do not require the Member States to refuse or to attach restrictions to the grant of an environmental permit for the construction and operation of an industrial installation such as the permits at issue in the main actions, or to adopt specific compensatory measures for each permit granted of that kind, even where the national emission ceilings for SO_2 and NO_x are exceeded or risk being exceeded.**

3. Article 4 of Directive 2001/81 is not unconditional and sufficiently precise for individuals to be able to rely upon it before the national courts before 31 December 2010.

Article 6 of Directive 2001/81 grants rights to individuals directly concerned which can be relied upon before the national courts in order to claim that, during the transitional period from 27 November 2002 to 31 December 2010, the Member States should adopt or envisage, within the framework of national programmes, appropriate and coherent policies and measures capable of reducing, as a whole, emissions of the pollutants covered so as to comply with the national ceilings laid down in Annex I to that directive by the end of 2010 at the latest, and should make the programmes drawn up for those purposes available to the public and appropriate organisations by means of clear, comprehensible and easily accessible information.

[Signatures]

* Language of the case: Dutch.

JUDGMENT OF THE COURT (Second Chamber)

22 January 2009 (*)

(Pollution and nuisance – Directive 96/61/EC – Annex I – Subheading 6.6(a) – Intensive rearing of poultry – Definition – Meaning of 'poultry' – Maximum number of animals per installation)

In Case C-473/07,

REFERENCE for a preliminary ruling under Article 234 EC from the Conseil d'État (France), made by decision of 7 May 2007, received at the Court on 25 October 2007, in the proceedings

Association nationale pour la protection des eaux et rivières-TOS,

Association OABA

v

Ministère de l'Écologie, du Développement et de l'Aménagement durables,

intervening party:

Association France Nature Environnement,

THE COURT (Second Chamber),

composed of C.W.A. Timmermans, President of the Chamber, K. Schiemann, J. Makarczyk, P. Kūris (Rapporteur), and C. Toader, Judges,

Advocate General: P. Mengozzi,

Registrar: R. Şereş, Administrator,

having regard to the written procedure and further to the hearing on 18 September 2008,

after considering the observations submitted on behalf of:

– Association nationale pour la protection des eaux et rivières-TOS, by P. Jeanson, Vice-President of the Association,

– France Nature Environnement, by R. Léost, Vice-President of the association,

– the French Government, by G. de Bergues and A.-L. During, acting as Agents,

– the Greek Government, by V. Kontolaimos and S. Papaioannou, acting as Agents,

– the Commission of the European Communities, by A. Alcover San Pedro and J.-B. Laignelot, acting as Agents,

after hearing the Opinion of the Advocate General at the sitting on 6 November 2008,

gives the following

Judgment

1 This reference for a preliminary ruling concerns the interpretation of subheading 6.6(a) of Annex I to Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (OJ 1996 L 257, p. 26), as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003 (OJ 2003 L 284, p. 1; 'Directive 96/61').

2 The reference was made by the Conseil d'État (Council of State) in the course of proceedings brought by the Association nationale pour la protection des eaux et rivières-TOS (National Association for the Protection of Waters and Rivers) and the OABA association seeking, on grounds of misuse of powers, annulment of Decree No 2005-989 of 10 August 2005 amending the nomenclature of classified installations (JORF, 13 August 2005, Text 52).

Legal context

Community legislation

3 Article 1 of Directive 96/61 provides:

'The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to [Council] Directive 85/337/EEC [of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment] and other relevant Community provisions.'

4 Article 2 of Directive 96/61 provides:

'For the purposes of this Directive:

...

(3) "installation" shall mean a stationary technical unit where one or more activities listed in Annex I are carried out …

(4) "existing installation" shall mean an installation in operation or, in accordance with legislation existing before the date on which this Directive is brought into effect, an installation authorised or in the view of the competent authority the subject of a full request for authorisation, provided that that installation is put into operation no later than one year after the date on which this Directive is brought into effect;

...

(9) "permit" shall mean that part or the whole of a written decision (or several such decisions) granting authorisation to operate all or part of an installation, subject to certain conditions which guarantee that the installation complies with the requirements of this Directive. …

…’

5 Article 4 of Directive 96/61 states:

‘Member States shall take the necessary measures to ensure that no new installation is operated without a permit issued in accordance with this Directive …’

6 Article 9 of Directive 96/61, entitled ‘Conditions of the permit’, states:

‘1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 3 and 10 for the granting of permits in order to achieve a high level of protection for the environment as a whole by means of protection of the air, water and land.

2. In the case of a new installation or a substantial change where Article 4 of Directive 85/337/EEC applies, any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6 and 7 of that Directive shall be taken into consideration for the purposes of granting the permit.

3. The permit shall include emission limit values for pollutants, in particular, those listed in Annex III, likely to be emitted from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another (water, air and land). If necessary, the permit shall include appropriate requirements ensuring protection of the soil and ground water and measures concerning the management of waste generated by the installation. Where appropriate, limit values may be supplemented or replaced by equivalent parameters or technical measures.

For installations under subheading 6.6 in Annex I, emission limit values laid down in accordance with this paragraph shall take into account practical considerations appropriate to these categories of installation.

4. Without prejudice to Article 10, the emission limit values and the equivalent parameters and technical measures referred to in paragraph 3 shall be based on the best available techniques, without prescribing the use of any technique or specific technology, but taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions. In all circumstances, the conditions of the permit shall contain provisions on the minimisation of long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole.

…’

7 Article 16(2) of Directive 96/61 provides:

‘The Commission shall organise an exchange of information between Member States and the industries concerned on best available techniques, associated monitoring, and developments in them. Every three years the Commission shall publish the results of the exchanges of information.’

8 Annex I to Directive 96/61 lays down the categories of industrial activities referred to in Article 1. Subheading 2 of the introduction to Annex I states:

‘The threshold values given below generally refer to production capacities or outputs. …’

9 In subheading 6.6(a), that annex also mentions, as categories of industrial activities referred to in Article 1 of Directive 96/61:

‘Installations for the intensive rearing of poultry … with more than … 40 000 places for poultry’.

10 Annex III to Directive 96/61, entitled ‘Indicative list of the main polluting substances to be taken into account if they are relevant for fixing emission limit values’, sets out various air and water pollutants. It thus mentions, in relation to air, inter alia, oxides of nitrogen and other nitrogen compounds, and metals and their compounds. With regard to water, it mentions, inter alia, organophosphorus compounds, metals and their compounds, and substances which contribute to eutrophication (in particular, nitrates and phosphates).

National legislation

11 Annex I to Decree No 2005-989 amending the nomenclature of classified installations, contains, inter alia, the following table:

NUMBER	DESCRIPTION OF THE HEADING	A.D.S. (1)	R (2)
…			

2111	Poultry, game birds (rearing, sale, etc), excluding the specific activities referred to under other headings:
	
	1. More than 30 000 animal-equivalents……...
	
	From 5 000 to 30 000 animal-equivalents…….
	
	Note – Poultry and game birds are counted by using the following values expressed as animal-equivalents:
	
	quail = 0.125;
	
	pigeon, partridge = 0.25;
	
	cockerel = 0.75;
	
	small chicken = 0.85;
	
	hen, standard chicken, ‘quality label’ chicken, organic chicken, pullet, laying hen, breeder hen, pheasant, guinea fowl, mallard duck = 1;
	
	large chicken = 1.15;
	
	roasting duck, duck ready for force-feeding, breeder duck = 2;
	
	small turkey = 2.20;
	
	medium turkey, breeder turkey, goose = 3;
	
	large turkey = 3.50;
		A
		
		D
			3

	force-fed geese or duck = 7;		
…			

(1) A: permit, D: declaration, S: easement in the public interest

(2) Posting range in kilometres

The dispute in the main proceedings and the question referred for a preliminary ruling

12 The Association nationale pour la protection des eaux et rivières-TOS and OABA claim, in support of their action before the Conseil d'État for annulment of all or part of Decree No 2005-989, that that decree does not comply with subheading 6.6(a) of Annex I to Directive 96/61. That decree, they argue, provides, under heading 2111 of the nomenclature of classified installations, for a threshold of 30 000 'animal-equivalents' beyond which the rearing of poultry and game cannot be carried out without first obtaining a permit to do so, establishing, inter alia, a conversion coefficient of 0.125 for quail, and 0.25 for partridge and pigeon. Thus, by applying those coefficients, a farm of more than 40 000 quails, partridges or pigeons would not exceed the threshold of 30 000 'animal-equivalents' and could be operated under the declaration system.

13 In the grounds of its decision, the Conseil d'État notes, with regard to subheading 6.6(a) of Annex I to Directive 96/61, that:

– installations for the intensive rearing of poultry with more than 40 000 places are subject to an authorisation requirement;

– that directive does not define the species to be regarded as 'poultry' for the purposes of that annex, whereas directives applicable to poultry under other legislation expressly lay down the species which fall within their scope, either by excluding quail, partridge and pigeon, or by including them.

14 The Conseil d'État accordingly decided to stay the proceedings and refer the following question to the Court of Justice for a preliminary ruling:

'Must subheading 6.6(a) of Annex I to Directive 96/61 …, which applies to installations for the intensive rearing of poultry with more than 40 000 places, be interpreted:

– (i) as including within its scope quails, partridges and pigeons; and if so,

– (ii) as authorising a mechanism for calculating authorisation thresholds on the basis of a system of "animal-equivalents", which gives weighting to the number of animals per place according to species so that account may be taken of the amount of nitrogen actually excreted by the various species?'

The question referred for a preliminary ruling

15 At the outset, it should be noted that it is clear from the provisions of Directive 96/61, and subheading 6.6(a) of Annex I thereto, that installations for the intensive rearing of poultry with more than 40 000 places are subject to a system of prior authorisation.

16 The scope of that provision is determined by three cumulative elements, namely that it must be ‘intensive’ rearing, that it must involve the rearing of poultry, and that the installations concerned must have more than 40 000 places.

17 It is, in addition, common ground that Directive 96/61 does not define the term ‘intensive rearing’, the term ‘poultry’ or the term ‘places’.

The first part of the question referred

18 In the first part of its question, the referring court asks whether the term ‘poultry’, used in subheading 6.6(a) of Annex I to Directive 96/61, includes quails, partridges and pigeons.

19 As a preliminary point, the French Government asserts, inter alia, that quails, partridges and pigeons cannot be reared intensively. Subheading 6.6(a) of Annex I to Directive 96/61, it argues, is not therefore intended to apply to those birds.

20 Such reasoning cannot be accepted.

21 The French Government has produced no scientific evidence to demonstrate that it is impossible to rear those birds intensively, and the mere fact that French quail or pigeon farms normally contain an average of 3 000 animals is not such as to establish that farms of more than 40 000 birds are not likely to exist.

22 In addition, it should be noted that the existence of intensive rearing of some of those birds is envisaged by French legislation, as is clear, in particular, from the actual provisions of the Ministerial Decree of 18 September 1985 establishing the equivalence coefficients for battery farming (JORF, 8 October 1985, p. 11683) which lays down, for a farmer, the minimum surface area for battery farming of 200 000 quails sold alive, or 120 000 quails sold dead.

23 Further, as regards the term ‘poultry’, which is not specifically defined by Directive 96/61, it should be borne in mind that the usual meaning of that word describes all those birds farmed for their eggs or their meat. Quails, partridges and pigeons are species of birds which may be farmed for the consumption of their eggs or their meat.

24 That interpretation can also be based on the general scheme and purpose of the directive (see, by analogy, Case C-72/95 *Kraaijeveld and Others* [1996] ECR I-5403, paragraph 38).

25 In that regard, it must be borne in mind that the purpose of Directive 96/61, as laid down in Article 1, is to achieve integrated prevention and control of pollution by putting in place measures designed to prevent or reduce the emissions, of the activities listed in Annex I, into the air, water and land in order to achieve a high level of protection of the environment.

26 As the Advocate General states in point 34 of his Opinion, that integrated approach is realised by appropriate coordination of the procedure and authorisation conditions for industrial installations whose potential for pollution is significant, making it possible to achieve the highest level of protection for the environment as a whole, which must in all cases include provisions minimising long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole.

27 Since the purpose of Directive 96/61 has been broadly defined, it cannot be held that subheading 6.6(a) of Annex I could be interpreted in such a way as to exclude quail, partridge and pigeon.

28 The fact, relied upon by the French Government, that point 17(a) of Annex I to Directive 85/337, in the version of that annex resulting from Council Directive 97/11/EC of 3 March 1997 (OJ 1997 L 73, p. 5), refers to installations for intensive rearing of poultry containing more than 85 000 places for broiler chickens or more than 60 000 for hens cannot, moreover, affect the interpretation which must be given to subheading 6.6(a) of Annex I to Directive 96/61. The latter is specific legislation which, as is clear from its wording, covers poultry in the broader sense and lays down a threshold which is different to those provided for in point 17(a) of Annex I to Directive 85/337.

29 In addition, the French Government's argument which seeks to restrict the scope of subheading 6.6(a) of Annex I to Directive 96/61 to laying hens, meat chickens, turkey, duck and guinea fowl only, on the basis that such a restriction was imposed in the document on the best available techniques in intensive rearing of poultry and pigs (BREF), published by the Commission in the course of July 2003 (OJ 2003 C 170, p. 3) pursuant to Article 16(2) of Directive 96/61, must be rejected.

30 It must be pointed out, first, that the BREF document itself states that the interpretation of the term 'poultry' is specific to that document and, second, that such a document has no binding effect or interpretative value for Directive 96/61, as it is limited to providing an inventory of technical knowledge on the best available farming techniques.

31 Consequently, the fact that the BREF document in question does not concern quail, partridge or pigeon does not in any way mean that those three birds are not covered by the term 'poultry' appearing in subheading 6.6(a) of Annex I to Directive 96/61.

32 Lastly, it is necessary to reject the French Government's contention that the proposal for a Directive of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control), presented by the Commission on 21 December 2007 (COM(2007) 844 final) – designed to revise and to recast a number of Community instruments, including Directive 96/61, into a single legal document – lends support to a narrow interpretation of the term 'poultry' within the meaning of Directive 96/61.

33 A proposal for a directive, even if it does no more than reshape the legislation in force into consistent law, cannot serve as a basis for the interpretation of a directive in force.

34 In the light of those considerations, the answer to the first part of the question referred is that the term 'poultry' which appears in subheading 6.6(a) of Annex I to Directive 96/61 must be interpreted as including quails, partridges and pigeons.

The second part of the question referred

35 By its question, the referring court also wishes to establish whether subheading 6.6(a) of Annex I to Directive 96/61 precludes a Member State from establishing a system, known as 'animal-equivalents', which consists of establishing prior authorisation thresholds for installations for intensive rearing of poultry by weighting the number of animals per place according to species so that account may be taken of the amount of nitrogen actually excreted by the various birds.

36 The applicant associations in the main proceedings claim that the use of a system of 'animal-equivalents' is not prohibited, as long as the authorisation threshold remains at or below 40 000 birds physically present in the installation at any given moment.

37 The French Government contends that the French legislation provides that a permit is necessary for poultry or game bird farming of more than 30 000 'animal-equivalents', and sets a weighting coefficient

of 0.125 for quail and 0.25 for partridge and pigeon. Those coefficients were calculated in such a way as to reflect not only the amount of nitrogen excreted by the different species on the basis of data published by the Policy Committee on environmentally-friendly agricultural practices (Corpen), a body under the supervision of the Ministry of Agriculture and the Ministry of the Environment, but also all the other effects on the environment such as the amount of effluent produced in a year and the nuisance linked to noise and smell.

38 The Commission argues that, while the interpretation given by the French Government may appear justified, it is, in the current state of Community law, tantamount to an interpretation *contra legem*. According to the Commission, the expression 'more than … 40 000 places for poultry' contained in subheading 6.6(a) of Annex I to Directive 96/61 refers to a simultaneous production capacity of more than 40 000 game birds, and not to an authorisation threshold which depends on the pollution generated by each bird species.

39 In that regard, while it is not in dispute that the term 'place' is not defined by Directive 96/61, it should nevertheless be noted that subheading 2 of the introduction to Annex I to that directive states that '[t]he threshold values given below generally refer to production capacities or outputs'. Directive 96/61 does not therefore envisage, without at the same time excluding it, establishment of the authorisation threshold in accordance with a system of 'animal-equivalents'.

40 As the purpose of Directive 96/61 is the prevention and control of pollution arising from certain activities, including intensive rearing of poultry, the use of a method of 'animal-equivalents' should be permitted only if it is fully consistent with that objective. Use of that method must not, by contrast, have the effect of excluding from the system established by that directive installations set up under that method in relation to their total number of places.

41 In the present case, the link that might exist between the content of the French legislation and the taking into account of the level of nitrogen actually excreted by those birds has, moreover, not been proved by the French Government.

42 Suffice it to state that the information contained in the annexes to the circular of the ministère de l'Écologie, du Développement et de l'Aménagement durables (Ministry for Ecology, Sustainable Development and Planning) of 7 September 2007 on classified installations (farms, poultry) use of new references for waste material (Bulletin officiel, 30 October 2007, MEDAD 2007/20, Text 15, p. 1) shows that the level of nitrogen waste from a quail, a partridge or a pigeon in comparison with that of a standard chicken does not correspond to the weighting selected in Decree No 2005-989. The latter provides that a standard chicken is equivalent to eight quails, four partridges or four pigeons, even though the aforementioned information shows that excretions from a quail or a partridge contain a level of nitrogen equal to one half of that of a standard chicken, while a pigeon produces five times more. According to that same information, the level of phosphorous, copper and zinc in the waste of quails, partridges or pigeons is also greater than that contained in the waste of standard chickens.

43 At the hearing, with a view to justifying that lack of proportionality, the French Government asserted that other effects on the environment were taken into account, without, however, providing any scientific evidence establishing the nature and scale of those other effects on the environment.

44 In those circumstances, and as the Advocate General stated in point 54 of his Opinion, it appears that Decree No 2005-989 leads to intensive rearing installations consisting of 40 001 to 240 000 quails, or 40 001 to 120 000 partridges or pigeons, being exempted from the prior authorisation procedure laid down by Directive 96/61, notwithstanding the fact that those installations are liable to produce an

amount of nitrogen, phosphorous, copper and zinc greater than that produced by installations for the intensive rearing of 40 000 standard chickens.

45 Having regard to all of the foregoing, the reply to the second part of the question is that subheading 6.6(a) of Annex I to Directive 96/61 precludes national legislation, such as that at issue in the main proceedings, which calculates the thresholds for authorisation of installations for intensive rearing on the basis of a system of 'animal-equivalents' founded on a weighting of animals by places according to species so that account may be taken of the amount of nitrogen actually excreted by the various bird species.

Costs

46 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Second Chamber) hereby rules:

1. **The term 'poultry', which appears in subheading 6.6(a) of Annex I to Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003, must be interpreted as including quails, partridges and pigeons.**

2. **Subheading 6.6(a) of Annex I to Directive 96/61, as amended by Regulation No 1882/2003, precludes national legislation, such as that at issue in the main proceedings, which calculates the thresholds for authorisation of installations for intensive rearing on the basis of a system of 'animal-equivalents' founded on a weighting of animals by places according to species so that account may be taken of the amount of nitrogen actually excreted by the various bird species.**

[Signatures]

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* Language of the case: French.

Case C-237/07

Dieter Janecek

v

Freistaat Bayern

(Reference for a preliminary ruling from the Bundesverwaltungsgericht)

(Directive 96/62/EC – Ambient air quality assessment and management – Fixing of limit values – Entitlement of a third party, whose health has been impaired, to have an action plan drawn up)

Summary of the Judgment

1. *Environment – Ambient air quality assessment and management – Directive 96/62*

(Council Directive 96/62, as amended by Regulation No 1882/2003, Art. 7(3))

2. *Environment – Ambient air quality assessment and management – Directive 96/62*

(Council Directive 96/62, as amended by Regulation No 1882/2003, Art. 7(3))

1. Article 7(3) of Directive 96/62 on ambient air quality assessment and management, as amended by Regulation No 1882/2003, must be interpreted as meaning that, where there is a risk that the emission limit values in respect of particulate matter PM10 or alert thresholds may be exceeded, persons directly concerned must be in a position to require the competent national authorities to draw up an action plan, even though, under national law, those persons may have other courses of action available to them for requiring those authorities to take measures to combat atmospheric pollution.

(see para. 42, operative part 1)

2. In the application of Article 7(3) of Directive 96/62 on ambient air quality assessment and management, as amended by Regulation No 1882/2003, the Member States are obliged, subject to judicial review by the national courts, to take such measures – in the context of an action plan and in the short term – as are capable of reducing to a minimum the risk that the emission limit values in respect of particulate matter PM10 or alert thresholds may be exceeded and of ensuring a gradual return to a level below those values or thresholds, taking into account the factual circumstances and all opposing interests.

(see para. 47, operative part 2)

JUDGMENT OF THE COURT (Second Chamber)

25 July 2008 (*)

(Directive 96/62/EC – Ambient air quality assessment and management – Fixing of limit values

– Entitlement of a third party, whose health has been impaired, to have an action plan drawn up)

In Case C-237/07,

REFERENCE for a preliminary ruling under Article 234 EC from the Bundesverwaltungsgericht (Germany), made by decision of 29 March 2007, received at the Court on 14 May 2007, in the proceedings

Dieter Janecek

v

Freistaat Bayern,

THE COURT (Second Chamber),

composed of C.W.A. Timmermans, President of the Chamber, L. Bay Larsen, K. Schiemann, J. Makarczyk and J.-C. Bonichot (Rapporteur), Judges,

Advocate General: J. Mazák,

Registrar: B. Fülop, Administrator,

having regard to the written procedure and further to the hearing on 5 June 2008,

after considering the observations submitted on behalf of:

– Mr Janecek, by R. Klinger, Rechtsanwalt,

– the Netherlands Government, by C. Wissels and M. De Grave, acting as Agents,

– the Austrian Government, by C. Pesendorfer, acting as Agent,

– the Commission of the European Communities, by F. Erlbacher, A. Alcover San Pedro and D. Recchia, acting as Agents,

having decided, after hearing the Advocate General, to proceed to judgment without an Opinion,

gives the following

Judgment

1 This reference for a preliminary ruling concerns the interpretation of Article 7(3) of Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management (OJ 1996 L 296, p. 55), as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003 (OJ 2003 L 284, p. 1; 'Directive 96/62').

2 The reference has been made in the course of proceedings between Mr Janecek and the Freistaat Bayern concerning an application for an order requiring the Freistaat Bayern to draw up an air quality action plan in the Landshuter Allee district in Munich, where the applicant lives, the plan in question to include the measures to be taken in the short term to ensure compliance with the limit set by Community legislation in respect of ambient air emissions of particulate matter PM_{10}.

Legal context

Community legislation

3 According to the 12th recital in the preamble to Directive 96/62:

'… in order to protect the environment as a whole and human health, it is necessary that Member States take action when limit values are exceeded in order to comply with these values within the time fixed'.

4 Annex I to Directive 96/62 contains a list of atmospheric pollutants to be taken into consideration in the assessment and management of ambient air quality. Item 3 in that list refers to '[f]ine particulate matter such as soot (including $[PM]_{10}$)'.

5 Article 7 of Directive 96/62, headed 'Improvement of ambient air quality – General requirements', provides:

'1. Member States shall take the necessary measures to ensure compliance with the limit values.

…

3. Member States shall draw up action plans indicating the measures to be taken in the short term where there is a risk of the limit values and/or alert thresholds being exceeded, in order to reduce that risk and to limit the duration of such an occurrence. ...'

6 Article 8 of the directive, headed 'Measures applicable in zones where levels are higher than the limit value', provides:

'1. Member States shall draw up a list of zones and agglomerations in which the levels of one or more pollutants are higher than the limit value plus the margin of tolerance.

Where no margin of tolerance has been fixed for a specific pollutant, zones and agglomerations in which the level of that pollutant exceeds the limit value shall be treated in the same way as the zones and agglomerations referred to in the first subparagraph, and paragraphs 3, 4 and 5 shall apply to them.

2. Member States shall draw up a list of zones and agglomerations in which the levels of one or more pollutants are between the limit value and the limit value plus the margin of tolerance.

3. In the zones and agglomerations referred to in paragraph 1, Member States shall take measures to ensure that a plan or programme is prepared or implemented for attaining the limit value within the specific time-limit.

The said plan or programme, which must be made available to the public, shall incorporate at least the information listed in Annex IV.

4. In the zones and agglomerations referred to in paragraph 1, where the level of more than one pollutant is higher than the limit values, Member States shall provide an integrated plan covering all the pollutants concerned.

…'

7 Article 5(1) of Council Directive 1999/30/EC of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air (OJ 1999 L 163, p. 41) provides:

'Member States shall take the measures necessary to ensure that concentrations of PM_{10} in

ambient air, as assessed in accordance with Article 7, do not exceed the limit values laid down in Section I of Annex III as from the dates specified therein.

The margins of tolerance laid down in Section I of Annex III shall apply in accordance with Article 8 of Directive 96/62/EC.'

8 Stage 1, section 1 of Annex III to Directive 1999/30 sets out, in a table, the limit values for particulate matter PM_{10}.

National legislation

9 Directive 96/62 was transposed into German law by the Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge (Federal Law on protection against the harmful effects of air pollution, noise, vibrations and other types of nuisance on the environment), as published on 26 September 2002 (BGBl I, p. 3830), as amended by the Law of 25 June 2005 (BGBl I, p. 1865; 'the Federal Law on combating pollution').

10 Paragraph 45 of the Federal Law on combating pollution, headed 'Improvement of air quality', provides:

'(1) The competent authorities shall take the measures necessary to comply with the emission values fixed pursuant to Paragraph 48a, in particular by means of the plans provided for under Paragraph 47.

…'

11 Paragraph 47 of that Law, headed 'Air quality plans, action plans, Land regulations', provides:

'(1) Where the limit values plus the statutory margins of tolerance defined by regulation pursuant to Paragraph 48a(1) are exceeded, the competent authorities shall draw up an air quality plan which determines the measures necessary for the permanent reduction of atmospheric pollutants and which complies with the requirements of the regulation.

(2) Where there is a risk of the emission limit values or alert thresholds defined by regulation pursuant to Paragraph 48a(1) being exceeded, the competent authority shall draw up an action plan laying down the measures to be taken in the short term which must be capable of reducing that risk or of limiting the duration of such an occurrence. Action plans may be incorporated in an air quality plan pursuant to subparagraph 1.

…'

12 The emission limit values referred to in Paragraph 47 of the Federal Law on combating pollution are fixed in the 22nd regulation for the implementation of that Law, which provides, in Paragraph 4(1):

'The average emission limit value over a 24-hour period in respect of PM_{10}, having regard to the protection of human health, is 50 µg/m³, which may be exceeded 35 times in a calendar year …'

The dispute in the main proceedings and the questions referred for a preliminary ruling

13 Mr Janecek lives on the Landshuter Allee on Munich's central ring road, approximately 900 metres north of an air quality measuring station.

14 Measurements taken at that station have shown that, in 2005 and 2006, the limit value fixed for

emissions of particulate matter PM_{10} was exceeded much more than 35 times, even though that is the maximum number of instances permitted under the Federal Law on combating pollution.

15 It is common ground that an air quality action plan exists in respect of the city of Munich, that action plan having been declared mandatory on 28 December 2004.

16 However, the applicant in the main proceedings brought an action before the Verwaltungsgericht (Administrative Court) Munich for an order requiring the Freistaat Bayern to draw up an air quality action plan in the Landshuter Allee district, so as to determine the measures to be taken in the short-term in order to ensure compliance with the maximum permitted number of instances – 35 per year – of the emission limit value for particulate matter PM_{10} being exceeded. The Verwaltungsgericht Munich dismissed that action as unfounded.

17 On appeal, the Verwaltungsgerichtshof (Higher Administrative Court) took a different view, holding that the residents concerned may require the competent authorities to draw up an action plan, but that they are not entitled to insist that it must include the particular measures that would guarantee compliance in the short-term with the emission limit values for particulate matter PM_{10}. According to the Verwaltungsgerichtshof, the national authorities are required only to ensure that such a plan pursues that objective to the extent to which it is possible and proportionate for it to do so. Consequently, it ordered the Freistaat Bayern to draw up an action plan complying with those requirements.

18 Mr Janecek and the Freistaat Bayern appealed to the Bundesverwaltungsgericht (Federal Administrative Court) against the judgment of the Verwaltungsgerichtshof. According to the Bundesverwaltungsgericht, the applicant in the main proceedings cannot rely on any entitlement to have an action plan drawn up pursuant to Paragraph 47(2) of the Federal Law on combating pollution. The Bundesverwaltungsgericht takes the view, moreover, that neither the spirit nor the letter of Article 7(3) of Directive 96/62 confers a personal right to have an action plan drawn up.

19 The referring court states that, even though the – albeit unlawful – failure to adopt an action plan does not, under national law, prejudice the rights of the applicant in the main proceedings, he is not without the means to ensure compliance with the legislation. Protection against the harmful effects of particulate matter PM_{10} should be secured by measures that are independent of such a plan, which the persons concerned are entitled to require the competent authorities to implement. Thus, effective protection is assured, under the same conditions as those that would result from the drawing-up of an action plan.

20 The Bundesverwaltungsgericht recognises, however, that there is a school of thought which draws different conclusions from the Community rules in question, namely that the third parties affected are entitled to have action plans drawn up, which appears to be confirmed by the judgment in Case C-59/89 *Commission* v *Germany* [1991] ECR I-2607.

21 In those circumstances, the Bundesverwaltungsgericht decided to stay the proceedings and to refer the following questions to the Court of Justice for a preliminary ruling:

‘(1) Is Article 7(3) of Council Directive 96/62… to be interpreted as meaning that a third party whose health is impaired is entitled to the preparation of an action plan even if, irrespective of any action plan, he is in a position to enforce his right to avoid any detriment to his health as a result of the emission limit value for particulate matter PM_{10} being exceeded, by bringing an action for intervention by the public authority?

(2) If so, is a third party who is affected by such concentrations of particulate matter PM_{10} as could be detrimental to health entitled to have an action plan drawn up laying down the measures to be taken in the short term to ensure strict compliance with the emission limit value for particulate matter PM_{10}?

(3) If the answer to Question 2 is in the negative, to what extent must the measures included in an action plan serve to reduce the risk of exceeding the limit value and to limit the duration of such an occurrence? Can an action plan be limited, on the principle of "one step at a time", to measures which, while not guaranteeing compliance with the limit value, nevertheless contribute in the short term to improvements in ambient air quality?'

The questions referred for a preliminary ruling

Observations submitted to the Court

22 The applicant in the main proceedings submits that, whenever the failure of national authorities to comply with the requirements of a directive designed to protect public health could endanger human health, the persons concerned must be in a position to rely on the mandatory rules included in that directive (see, as regards Council Directive 80/779/EEC of 15 July 1980 on air quality limit values and guide values for sulphur dioxide and suspended particulates (OJ 1980 L 229, p. 30), Case C-361/88 *Commission* v *Germany* [1991] ECR I-2567, paragraph 16; and, as regards Council Directive 75/440/EEC of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States (OJ 1975 L 194, p. 26) and Council Directive 79/869/EEC of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States (OJ 1979 L 271, p. 44), Case C-58/89 *Commission* v *Germany* [1991] ECR I-4983, paragraph 14).

23 Taking the view that Directive 96/62 is designed to protect human health, the applicant in the main proceedings maintains that Article 7(3) of that directive constitutes a mandatory rule which requires an action plan to be drawn up even where there is merely a risk that a limit value may be exceeded. The obligation to draw up such a plan in that situation, the existence of which is not disputed in the main proceedings, is therefore a rule upon which the applicant is in a position to rely, on the basis of the case-law referred to in the previous paragraph of the present judgment.

24 With regard to the content of the action plan, the applicant in the main proceedings submits that it must lay down all the appropriate measures to ensure that the period during which the limit values are exceeded is kept to a minimum. That follows, in particular, from the broad logic of Article 7(3) of Directive 96/62 – which states clearly that action plans must be drawn up where there is a mere risk of those values being exceeded – and Article 8(3) of the directive, according to which, where limit values have already been exceeded, the Member States must take measures to ensure that a plan or programme is prepared or implemented for attaining the limit value within the specific time-limit.

25 The Netherlands Government submits that Article 7(3) of Directive 96/62 does not confer on third parties a personal right to have an action plan drawn up. The Member States, it argues, have a wide discretion in respect of both the adoption of action plans and the determination of their content.

26 It follows, the Netherlands Government continues, from Article 7(3) that the Community legislature intended to leave to the Member States the power to put in place an action plan and to take the ancillary measures which they consider necessary and proportionate in order to attain the result envisaged.

27 Accordingly, it continues, Article 7(3) of Directive 96/62 does not impose any obligation on the Member States as to the result to be achieved. Their broad discretion allows the Member States to weigh up different interests and to adopt specific measures, taking account of compliance with limit values as well as of other interests and obligations, such as free movement within the European Union.

28 Thus, the Member States are required only to put in place action plans setting out the

measures to be taken in the short-term in order to reduce the risk of those values being exceeded or to limit the duration of such an occurrence.

29 The Austrian Government points out that the Court has held that the Community-law provisions which fix limit values for the protection of human health also confer on the persons concerned a legally enforceable right to compliance with those limit values (Case C-59/89 *Commission* v *Germany*).

30 However, the Austrian Government takes the view that, while Article 7(3) of Directive 96/62 may have direct effect, it does not follow from this that Article 7(3) establishes a personal right on the part of individuals to have action plans drawn up, since, in its view, that provision covers only the adoption of measures – in the context of national programmes – which are liable to help ensure compliance with limit values.

31 The Commission submits that it is apparent from the wording of Directive 96/62, in particular the combined provisions of Articles 7(3) and 2(5) and the 12th recital in the preamble to the directive, that the fixing of limit values in respect of particulate matter PM_{10} serves to protect human health. The Court has established in relation to similar provisions that, whenever the exceeding of limit values was capable of endangering human health, the persons concerned were in a position to rely on those rules in order to assert their rights (Case C-361/88 *Commission* v *Germany*, paragraph 16; Case C-59/89 *Commission* v *Germany*, paragraph 19; and Case C-58/89 *Commission* v *Germany*, paragraph 14).

32 According to the Commission, the principles identified in those judgments apply to the action plans provided for under Directive 96/62. The competent authority is therefore obliged to draw up such plans where the conditions laid down by that directive are satisfied. It follows that a third party who is affected by the limit values being exceeded is in a position to assert his right to the preparation of an action plan, which is required for the attainment of the objective relating to the limit values set by that directive.

33 With regard to the content of the action plans, the Commission's response is based on the terms of Article 7(3) of Directive 96/62, according to which those action plans must provide for measures 'to be taken in the short term ... in order to reduce [the risk of the limit values being exceeded] and to limit the duration of such an occurrence'. The Commission takes the view that the competent authority has a discretion to take the measures which it considers to be the most appropriate, provided that those measures are designed in the light of what is actually possible and legally proportionate, in such a way as to enable levels to drop back below the prescribed limit values within the shortest possible time.

The Court's findings

The preparation of action plans

34 By its first question, the Bundesverwaltungsgericht is asking whether an individual can require the competent national authorities to draw up an action plan in the case – referred to in Article 7(3) of Directive 96/62 – where there is a risk that the limit values or alert thresholds may be exceeded.

35 That provision places the Member States under a clear obligation to draw up action plans both where there is a risk of the limit values being exceeded and where there is a risk of the alert thresholds being exceeded. That interpretation, which follows from a straightforward reading of Article 7(3) of Directive 96/62, is, moreover, confirmed in the 12th recital in the preamble to the directive. What is laid down in relation to the limit values applies all the more with regard to the alert thresholds, in respect of which, moreover, Article 2 – which defines the various terms used in the directive – provides that 'immediate steps shall be taken by the Member States as laid down in this Directive'.

36 In addition, the Court has consistently held that individuals are entitled, as against public bodies,

to rely on the provisions of a directive which are unconditional and sufficiently precise (see, to that effect, Case 148/78 *Ratti* [1979] ECR 1629, paragraph 20). It is for the competent national authorities and courts to interpret national law, as far as possible, in a way that is compatible with the purpose of that directive (see, to that effect, Case C-106/89 *Marleasing* [1990] ECR I-4135, paragraph 8). Where such an interpretation is not possible, they must disapply the rules of national law which are incompatible with the directive concerned.

37 As the Court of Justice has noted on numerous occasions, it is incompatible with the binding effect which Article 249 EC ascribes to a directive to exclude, in principle, the possibility of the obligation imposed by that directive being relied on by persons concerned. That consideration applies particularly in respect of a directive which is intended to control and reduce atmospheric pollution and which is designed, therefore, to protect public health.

38 Thus, the Court has held that, whenever the failure to observe the measures required by the directives which relate to air quality and drinking water, and which are designed to protect public health, could endanger human health, the persons concerned must be in a position to rely on the mandatory rules included in those directives (see Case C-361/88 *Commission* v *Germany*; Case C-59/89 *Commission* v *Germany*; and Case C-58/89 *Commission* v *Germany*).

39 It follows from the foregoing that the natural or legal persons directly concerned by a risk that the limit values or alert thresholds may be exceeded must be in a position to require the competent authorities to draw up an action plan where such a risk exists, if necessary by bringing an action before the competent courts.

40 The fact that those persons may have other courses of action available to them – in particular, the power to require that the competent authorities lay down specific measures to reduce pollution, which, as indicated by the referring court, is provided for under German law – is irrelevant in that regard.

41 Directive 96/62 does not place any restrictions on the measures which may be adopted pursuant to other provisions of national law; moreover, it contains wording that is quite specific with regard to planning for the purposes, as stated in the 12th recital in the preamble to the directive, of protecting the environment ‘as a whole’, taking account of all the factors to be considered, such as, in particular, the requirements for the operation of industrial installations or travel.

42 The answer to the first question must therefore be that Article 7(3) of Directive 96/62 must be interpreted as meaning that, where there is a risk that the limit values or alert thresholds may be exceeded, persons directly concerned must be in a position to require the competent national authorities to draw up an action plan, even though, under national law, those persons may have other courses of action available to them for requiring those authorities to take measures to combat atmospheric pollution.

The content of action plans

43 By its second and third questions, the Bundesverwaltungsgericht is asking whether the competent national authorities are obliged to lay down measures which, in the short term, would ensure that the limit value is attained, or whether they can confine themselves to taking measures to ensure a reduction in instances of the limit value being exceeded or limits on their duration and which are, consequently, liable to make it possible for the situation to be improved gradually.

44 According to Article 7(3) of Directive 96/62, action plans must include the measures ‘to be taken in the short term where there is a risk of the limit values and/or alert thresholds being exceeded, in order to reduce that risk and to limit the duration of such an occurrence’. It follows from that very wording that the Member States are not obliged to take measures to ensure that those limit values and/or alert thresholds are never exceeded.

45 On the contrary, it is apparent from the broad logic of the directive – which seeks an integrated reduction of pollution – that it is for the Member States to take measures capable of reducing to a minimum the risk of the limit values and/or alert thresholds being exceeded and the duration of such an occurrence, taking into account all the material circumstances and opposing interests.

46 It must be noted in this regard that, while the Member States thus have a discretion, Article 7(3) of Directive 96/62 includes limits on the exercise of that discretion which may be relied upon before the national courts (see, to that effect, Case C-72/95 *Kraaijeveld and Others* [1996] ECR I-5403, paragraph 59), relating to the adequacy of the measures which must be included in the action plan with the aim of reducing the risk of the limit values and/or alert thresholds being exceeded and the duration of such an occurrence, taking into account the balance which must be maintained between that objective and the various opposing public and private interests.

47 Therefore, the answer to the second and third questions must be that the Member States are obliged, subject to judicial review by the national courts, only to take such measures – in the context of an action plan and in the short term – as are capable of reducing to a minimum the risk that the limit values or alert thresholds may be exceeded and of ensuring a gradual return to a level below those values or thresholds, taking into account the factual circumstances and all opposing interests.

Costs

48 Since these proceedings are, for the parties to the main proceedings, a step in the action pending before the national court, the decision on costs is a matter for that court. Costs incurred in submitting observations to the Court, other than the costs of those parties, are not recoverable.

On those grounds, the Court (Second Chamber) hereby rules:

1. **Article 7(3) of Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management, as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003, must be interpreted as meaning that, where there is a risk that the limit values or alert thresholds may be exceeded, persons directly concerned must be in a position to require the competent national authorities to draw up an action plan, even though, under national law, those persons may have other courses of action available to them for requiring those authorities to take measures to combat atmospheric pollution.**

2. **The Member States are obliged, subject to judicial review by the national courts, only to take such measures – in the context of an action plan and in the short term – as are capable of reducing to a minimum the risk that the limit values or alert thresholds may be exceeded and of ensuring a gradual return to a level below those values or thresholds, taking into account the factual circumstances and all opposing interests.**

[Signatures]

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* Language of the case: German.